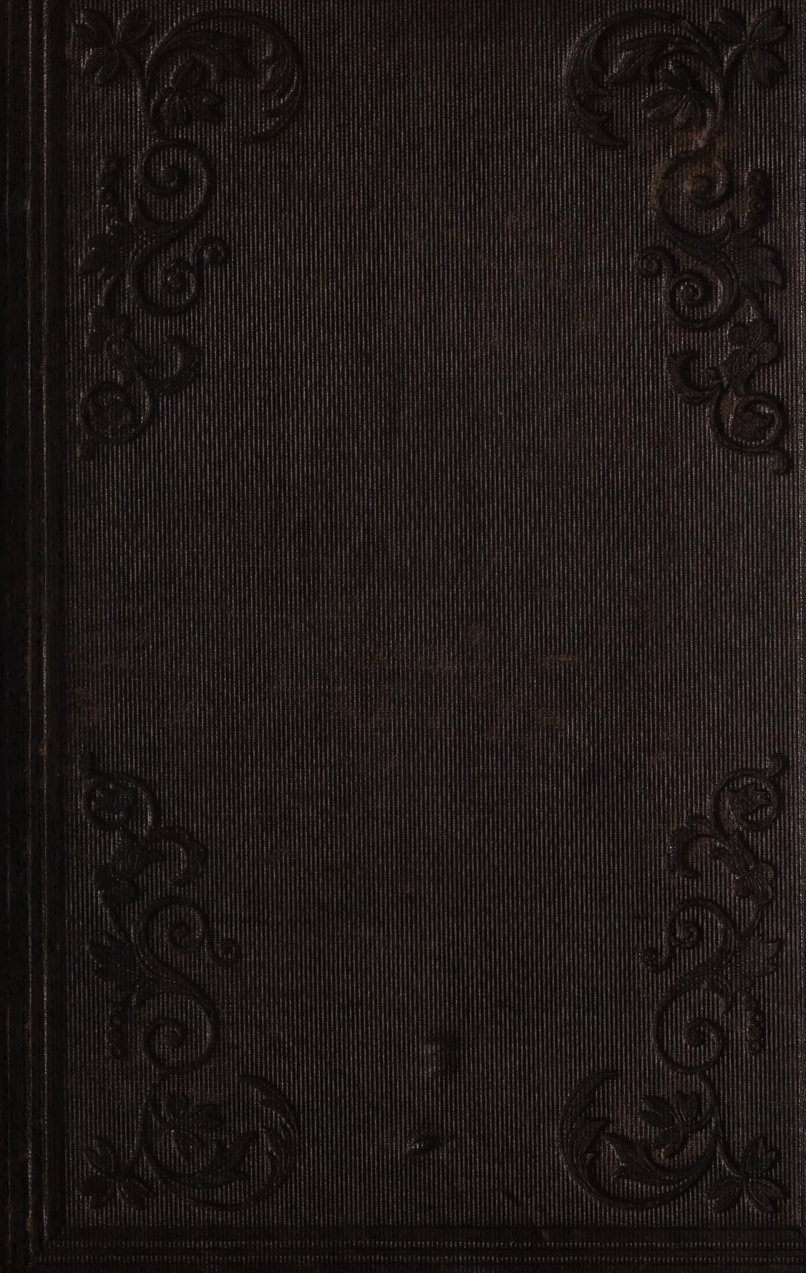

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THE

TEACHER OF HEALTH,

AND THE

LAWS OF THE HUMAN CONSTITUTION.

WM. A. ALCOTT, EDITOR.

Author of the Young Woman's Guide, Young Husband, Young Wife,
Young Mother, Young Housekeeper, House I Live in, &c. &c.

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ADVERTISEMENT.

The present series of this periodical was commenced nine years ago, and was called the "Moral Reformer, and Teacher on the Human Constitution." After two volumes were completed, a second series of six volumes was published, the first part of the title being changed to "Library of Health."

This volume completes the third series, and is the conclusion of the work. The same general plan has been followed from its beginning; but those who do not find it convenient to purchase all the volumes, will, we think, find either series sufficiently complete to be appropriately placed in their libraries without the others.

Each series of the work discusses, in a familiar manner, all subjects connected with Physical Education and Self-Management. They treat on the connection of light, air, temperature, cleanliness, exercise, sleep, food, drink, climate, the passions, affections, &c., with health, happiness and longevity. The editor takes the ground that a proper understanding of the constitutional laws of the human body, and of all its organs and functions, and a strict obedience thereto, are indispensable to the highest perfection and happiness, present and future, of every living human being. He deems this knowledge more and more indispensable in proportion to the progress of civilization and refinement. The work has been pledged to support no system nor set of principles, any farther than that system and those principles can be proved to be based on the laws of Physiology and revealed truth, and on human experience.

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TEACHER OF HEALTH.

JANUARY, 1843.

PHYSICAL EDUCATION.

Our leading object, as an editor, during the last eight years, two of which were spent on the Moral Reformer, and six on the Library of Health, has been the promotion of correct physical education by enlightening the community, especially parents and teachers, on the subjects of *Anatomy*, *Physiology*, and *Hygiene* or *Health.* This will still be our main or leading object—we are devoted to no other.

But it is no part of our intention—it never has been so—to diffuse light on the structure, functions and relations of man, as the ultimate *end* of our labors; but rather as a *means* to an end. Moral or spiritual advancement has been the chief end to which our eye has been directed, and still is. To make men more healthy and long lived, without making them any wiser or better, what good purpose could it possibly answer? It would do little if any thing more than to make them the more gigantic, if not the more mischievous animals.

Grant, however, that it were a worthy object at which to aim, to add to human health and longevity, without making the world wiser or better. We offer premiums for the most improved breed of horses, cattle and swine;

admit, for the moment, that it were desirable to improve man as well as the other animals. Granted, we still say, the most which could, in this respect, be claimed. How little, how insignificant the object, compared with that of elevating man as an intellectual being, and still more as a spiritual!

Our position in civilized society is such that our physical frame, or the laws which obtain in it, must be universally understood and universally applied in the work of early education, or morality and religion must not merely become stationary, but must—for a time at least—have a retrograde movement. No human power—military, civil or ecclesiastical—can possibly prevent it. Society must be reformed and improved, in no small degree at least, by the correct physical education—in the family, the school and the church—of the successive generations of men, as they severally appear upon the stage of action.

The reform will indeed be slow; it is best perhaps it should be so. Could parents and teachers be awakened and enlightened, and children better educated, both physically and morally, they would begin families under better circumstances than now; their children, in the same work might advance still farther; and thus we might proceed, till in the lapse of a few centuries we might hope for a radical change in the face of society—a change not more favorable to health and longevity, than to morality and sound intelligence.

We admit, indeed—we dare not attempt to deny it—that to rid the world of all the multiform evils that have their origin in the lusts that war in our members, and restore it to sound physical health, is no mean or unworthy object. But how much more noble is the work of elevating man heaven high, as it were, in comparison of what he now is, intellectually and morally! If it is something to raise him from the condition and capacity of a brute, and make him a "man," it is still more to make him, as the poet Young expresses it, "a god."

Let us then go on in our work. Let us labor and pray alway, and not faint. There remaineth, in the work of physical advancement, "very much land to be possessed." Let us make haste in doing good—let us do what our hands find to with our might—but in compliance with a wise old adage, let us "make haste slowly."

HEALTH THE BEST PREVENTIVE.

In Good's Study of Medicine, under the head Phlogotica, or Inflammations, we find the following words:

"The standard of firm health is the best guard against inflammations of every kind, or the state in which a man is the least susceptive of them." And after enumerating various exciting causes of this class of diseases, he repeats:—"Inflammations from any of these causes will partake of the character of the constitution; and hence proceed kindly or unkindly, according as the constitution is in a diseased or healthy condition." To which he still adds, in another place, by way of explanation and confirmation—"It is not till the constitution has been broken down, and the liver rendered feeble and torpid by the influence of a tropical sun, that hepatitis makes its appearance in its ordinary course of attack; phthisis (consumption) occurs in relaxed and delicate, and not in hardy and robust frames; psoas abscess, peritoneal inflammation, struma, (scrofula,) and those vast formations of pus which are sometimes found in parabysmic tumors or physconics, for the most part follow the same track."

Now we do not quote these passages as if they broached a new doctrine, but simply to do something towards removing an old one. Instead of regarding sound health, in man, woman or child, as the best preventive of disease, the more general notion is, that those who are in the possession of perfect health, and have sound and vigorous constitutions, are just as much exposed to disease, as those who are more feeble or positively sickly. Indeed there are not a few who regard them as more exposed, and more likely to suffer severely when attacked.

But it is not so, and in the nature of things cannot be. Every intelligent medical man will tell us so, as well as Dr. Good. It is not till the constitution has been in some way or other affected, if not impaired, that any disease whatever can find a lodgment. It is not inflammations, liver diseases, scrofula or abscesses alone that are encouraged by feeble health, but every ill to which flesh is heir. How important then that sound health, in all parts of the system, should be maintained; and how unphilosophical are the notions which generally prevail! And how great the need of popular instruction, in our families and schools, on this amazingly important subject!

HEALTH OF STUDENTS.

LETTERS TO A FATHER.—NO. I.

The following is the first of a series of "Letters to a Father," concerning the education of a son, who was disinclined to exercise, and prone to read and study late at night as well as under other circumstances unfavorable to his health. We hope the letters will be as useful to others as they are believed to have been to the individual for whom they were originally designed.

God in his Providence has shown me, by the interposition of the sciences connected with medicine, some of the causes of your son's ill health. Let me then impart to you the knowledge on this subject which I possess. It can at least do you no harm; it may do good.

Your son is afflicted with scrofula, in what Dr. Eberle would call its latent state. No matter, for the present, how he became so; though of that I may speak at another time. It may or may not proceed to an active form of the malady—I hope it will not.

Do not be alarmed at the word scrofula. Thousands in the single city of Boston are, at this moment, more or less affected with it; and as things are going on, I am afraid that in half a century more the disease will become so common as to warrant the statement that there are tens of thousands.

"The growth of the body," in this disease, says Eberle, "usually proceeds slowly; but the mental powers are generally precociously developed, and often astonishingly active. The head, particularly the posterior part, is usually large, and the temples flattened or somewhat depressed. This dormant or inactive state of the disease may continue for many years, and at last pass off without terminating in any particular local affections. More commonly, however, the scrofulous habit gradually acquires strength, and at last, under the influence of the usual exciting causes, shows itself in its more obvious and active form."

He also mentions—and it is usual for authors to do so—"a peculiar delicacy and languor of the countenance, with a soft, rosy tint of the prolabia and cheeks; or a pale, soft, flaccid, and apparently tumid aspect of the countenance, with a dull lead-colored circle round the mouth, and a swollen appearance of the upper lip." I do not think, however, that these appearances—except perhaps the tumid upper lip—are quite as certain indications of disease as those of the preceding paragraph.

But what are the exciting causes—that lead from latent to active scrofula—as mentioned by Dr. Eberle?

1. *Impure air.*—Nothing is more important, it is agreed on all hands, to scrofulous people, than pure air; and nothing more likely to accelerate the progress of the disease than bad air. No matter whether this air is breathed in one place or another—the factory, the shop, the school room, the parlor, or the bed room. No matter, I mean, if the emanations are the same—those which are generated by the human body—though I am aware that in some places there are emanations from other bodies, which add to the impurity. But a pure air, as pure as possible, is every thing in scrofula, whether latent or active; and every thing else, or almost every thing else, should be sacrificed, in order to obtain it.

2. *Inactivity of body.*—So powerful an excitant of scrofula is bodily inactivity, that I doubt whether a sensible writer on this subject can be found, who has not insisted on regular daily exercise in the open air. This is intended to exclude *inactivity* and *bad air* at the same time.

3. *An innutritious or indigestible diet.*—I asked an eminent medical man one day, what was usually intended by authors when they spoke of a bad diet in case of scrofula. He said, coarse vegetables in too great proportion, such as turnips, radishes, &c.; vegetables of bad quality; and fat or indigestible meats, as tendinous or gristly portions, &c. Then, said I, you do not consider good farinaceous food as prohibited. By no means, was the reply.

"The enjoyment," says Eberle—I quote him because he is as sound an author as I happen to have at hand—"of a pure, dry and equable air, an attention to proper clothing, so as to obviate as much as possible the injurious influences of atmospheric vicissitudes, a wholesome, abstemious, but nourishing diet, regular exercise in the open air, and cleanliness, constitute the means upon which our hopes of successful opposition to the progress of the malady must chiefly be placed. All kinds of stimulating, irritating articles of food must be carefully avoided."

4. But there is one more exciting cause of scrofula as deserving of our notice as any of the preceding. I mean *great activity of the mind.* We have seen that in scrofulous persons there is a tendency—a kind of innate tendency—to this very thing. We should, however, set our faces as a flint against it. Make the body work all it safely can, in the open pure air of heaven, provided, however, it can be done in such a way as to keep the nervous system and the mental powers quiet; but make the mind work as little as it possibly can without exalting the sensual activity.

Now had I a son of the age and temperament, and past and present habits of ——, I would, if possible, make him a farmer. It is true I do not know all the difficulties you may have to encounter, with a view to this end; but there can be none, I am sure, which I would not be willing to meet, in the hopes of rendering him useful and happy. I have a son of nearly four years of age, who with the same latent predisposition to scrofula, I intend to treat as I have advised you. He is now as old as I was when I began to attend school; and there is reason to believe he would make just such a precocious pupil. Yet I have no idea of sending him to school, or even teaching him to read these three years. I mean to keep his mind as inactive as possible till he is from seven to ten years old. I would gladly develope the *vegetable* part, and only the vegetable. Put him into the schools; and though he might delight and astonish us all, for a few years, he would, by the time he arrived at puberty, be ruined. If I had mines of gold and silver at my command, I would not let him be a book-worm, if in my power to help it. The farm and garden are the places for him; and there, in the good Providence of God, and with his permission, I intend to place him.

If the farm were as humiliating and useless a place as many suppose, it would greatly alter the case. But I have not so learned. The farmer is nature's true nobleman. His is the true sphere of action. He can reform himself—the social system—the church—the state. Not with pen, or public speech, or wand, or sword; but with plough, and hoe, and spade, and a strong, rightly guided intellect. Not in a year or a century; but in God's own good time—as soon as can be done with due regard to the public safety.

Let me prevail, therefore, when I entreat you, as you value the health and life and usefulness of your son, to do all in your power to direct his attention away from his books, and turn his thoughts as speedily as possible to agriculture and horticulture. I do not mean by this that I would have him ignorant, for ignorant he need not be though a farmer. He will still have time to study. The farm will be his college, as it ought to be; for if he ever goes to any other, it should not be till he has spent from ten to twenty years in the open air.

DRAWINGS OF THE HUMAN STOMACH.

It has long been known to medical men, that the lining membrane of the human stomach is affected more or less by the long continued use of alcoholic liquors. In the arrangements of Divine Providence, however, it was reserved for Dr. Thomas Sewall, of Washington, to bring out, as it were, this suffering organ, and expose it to the public gaze, that men may not merely "*hear*," but have ocular demonstration, and fear.

Dr. Sewall has caused to be prepared eight colored drawings, exactly representing the changes which the stomach undergoes, in passing from perfect health to the last stages of cancerous alcoholic disease. To accompany these, he has also prepared a small bound volume, entitled the Pathology of Drunkenness. A set of the drawings, of colossal size, costs ten dollars; though a smaller set can be obtained for seventy-five dollars for a hundred sets, or one dollar for a single set.

A strong effort is now making by Mr. E. C. Delavan—long known to the world as a devoted friend of temperance—to place Dr. Sewall's work and the drawings in every school district library in the state of New York. From a statement by Mr. Dwight, editor of the New York District School Journal, we learn that there are in the whole state about 11,000 school districts; and from a letter by the Superintendent of the schools to Mr. Delavan, it would seem that there are 600,000 children under instruction in them. But this does not determine the exact number of libraries.

The scheme of Mr. Delavan is as herculean as it is praise-worthy; and we hope it will be entirely successful. "No appeal," says Mr. Dwight, "can be made more effectually to the mind, no more fearful warning can be given to the appetite, than these delineations of the ravages of that fatal poison which so long has mingled death in the cup of pleasure. Impressions thus silently and certainly made on the minds of children cannot readily be effaced; and though the picture speak not, its power will be felt when other monitions are forgotten."

The example of Mr. Delavan is not wholly powerless. Another individual has already furnished the means to supply each school district in the city of New York with the volume of Dr. Sewall, and eight sets of the drawings for exhibition in as many public institutions in that city. Another has engaged to supply each school district in the city of Brooklyn. The Superintendent of common schools has engaged to supply every school district library in his own town. Mr. Delavan has also announced his determination to furnish a complete set of the colossal drawings, framed, to as many of our literary institutions as he can find means to supply.

The bearing of these efforts of Mr. Delavan and others on the public health needs not to be repeated. Would that not merely each school district of New York, but each family in the United States, were supplied with both the book and the plates. There is also a valuable essay on the Wines of antiquity, by Rev. Dr. Nott, of Union College, Schenectady, which goes with the copies already mentioned, at seventy-five cents a hundred, for common schools, and adds much to their value.

VENTILATION OF PUBLIC BUILDINGS.

When the importance of a constant supply of fresh air to health is as well understood as it is at the present day, it is surprising that so little provision should be made, in our public buildings intended for large auditories, for furnishing them with the first necessary of life. Without good wholesome air, how little can warmth and food do to make life comfortable!

Mr. Combe, in one of his lectures delivered in this city, urged this subject upon the attention of his hearers. And though I presume I can say little more than what he has said, and what has been before brought forward in your former journal, the Library of Health, yet repetition of remonstrance ought not to be intermitted where the case is urgent, until it leads to reform.

My purpose is to speak only of the state of things in this city. Let any one go to the State House and enter the Representatives' Hall while that body is in session. He is met at the door by a pestilential atmosphere which at first seems perfectly intolerable.* After he has been in the house a few moments, the senses get accustomed to the effluvia and bad gases, but the poison is no less injurious to the system. And I believe firmly that every member of the house who continues in his seat during its sessions, has the healthy tone of his body impaired, the energy and activity of his mind weakened, and his life as certainly shortened, by the foul atmosphere which he breathes, as if he took a daily dose of opium or alcohol.

If one goes to any court room in the city during a crowded trial, he finds the air as insupportable as at the House of Representatives. Judges and lawyers complain of the deadly influence of crowded houses upon their constitutions, but in vain.

All the lecture rooms that I have ever been in are very defective in their modes of ventilation, and so are many of the meeting houses.† Men, and still more, women, are daily suffering from the impure air of these places. Indeed many persons of feeble constitutions are obliged to give up all public meetings, for fear of the ruinous consequences.‡

The evil of which I complain is enormous. It often takes away half the pleasure of public meetings. Many persons experience great lassitude and uneasiness on such occasions, who are entirely unaware that the chief cause of their uneasiness is the impurity of the atmosphere.*—That our windows do not answer the purposes of ventilation is most obvious. If one man wishing to breathe freely pushes up a window, his neighbor, at the request of a lady who cannot bear the draught of air, immediately pushes it down.† And if it be left up, there is a great probability that some persons in its vicinity will catch cold. In the extreme days of winter especially, this mode of ventilation is excessively disagreeable.

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* We have met this same pestilential atmosphere at the entrance of public buildings, and even of school houses, a hundred times. Who can wonder that the average amount of time lost by sickness, among us, is increasing every year, as we find it to be ?—Ed.

† Some of the churches I have not entered, and therefore cannot speak of all.

‡ Many more will, ere long, give them up, unless something can be done in the way of ventilation.—Ed.

What then ought to be done? I am not sufficiently familiar with the subject of ventilation to go into details. But the subject is well understood by others. I know in general that a supply of fresh air can always be furnished, wherever people will pay for it.‡ In winter, hot air admitted into a room near the floor, with openings in the ceiling to allow of a free escape of the air, will answer the purpose. In summer, a constant supply of fresh air can be introduced from the outside of the building, and admitted near the floor, while similar openings in the ceiling will give a free circulation.

It is not creditable to our city government, that a new court house should have been built without the slightest attention to ventilation, so that the air in the passages, being never changed, seems like that of a dungeon, while that in the court rooms, while the courts are in session, is far worse. But what, I repeat it, can be done?

A Sufferer.

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* Not a little of that stupidity which is charged by religious teachers to other causes, is owing to the influence of bad air.—Ed.

† The same trouble is met with in railroad cars, steamboats, &c.—Ed.

‡ Nor does it cost much, after all. A belt of it, forty-five miles high, encircles our globe; and was doubtless intended by the liberal hand of the Creator, to be "without money and without price," like salvation itself. In truth it costs about as much, after all, to exclude as to admit it.—Ed.

SHORT BREATH, OR THE "PHTHISIC."

Persons of every age are to be found—perhaps in greater numbers than in former times—who are troubled with what is popularly called *phthisic;* in other words, they have greater or less difficulty in breathing. Dr. Good gives to this affection the name of "Short Breath;" and proceeds to describe five varieties of it, produced by as many different sources. 1. Short breath from organic deformity, oppression, or accidental injury. 2. From calcareous or other spicular materials inhaled while working on stone or metals. 3. From the mischievous action of metallic or other poisonous exhalations. 4. From a phlegmatic or cachectic habit. 5. Accompanied with oppressive fatness.

We do not intend to enter now upon the treatment of this disease, in all its varied forms; but we cannot forbear to say something of two of them. The whole subject is closely connected with physical education, or rather, in truth, forms a part of it.

The first form of the disease is that which is induced by organic causes, by oppression from tumors or other internal affections, or by accidental injury. Under the latter head are included the frequent diminution of the cavity of the chest by rickets, by a softening of the bones, or by some accidental injury by which the ribs or sternum have lost their proper form, and are become incurvated, and without a power of elevation.

"In all these cases," says Dr. G., "the healing art can do little more than look on. It may, perhaps, occasionally palliate some of the distress to which the patient is irrevocably doomed; but it cannot go beyond. Perfect tranquillity of body and mind, gentle exercise, a light diet, with a total abstinence from flatulent vegetables and fermented liquors, and an undeviating habit of regular hours, comprises, perhaps, the whole that can be recommended by the physician, or attempted by the patient."

The other variety of short breath, of the treatment of which we propose now to speak, is that which proceeds from or is accompanied by a short stunted figure, and considerable corpulence, or at least obesity of the chest. "We see persons of this description," Dr. G. says, "significantly described by the colloquial term *pursy*, pant, perspire, and grow fatigued, day after day, upon little exercise, and yet press on without any serious inconvenience to a late period of life; or if they sink suddenly and sooner, they yield rather to apoplexy, as a result of their general habit, than to the idiopathic affection before us. Abstinence from spirits, wines, and fermented beverages, a meagre allowance of animal food, a soluble state of the bowels, and exercise rather persevering than violent, will form the best plan for present ease, and the best guard against threatened mischief."

It is not uncommon for physicians to bleed in the last mentioned circumstances; but to this a strong protest is entered, on the ground that though it may afford some temporary relief, it is of no service in the end. The case is quoted of a female who in a few years had been bled about two thousand times, and was not a whit better than before the first bleeding. A warm bath and friction—often repeated, and continued till it excited perspiration—in about ten days produced a favorable change, and she was in the end greatly improved.

It is by no means uncommon to find children of a full or rather corpulent habit, who are affected with this difficulty of breathing, especially when they take cold; and for every attack of this sort they are dosed. What oceans of animal and vegetable oil, saying nothing of herb teas, elixir paregoric, and even laudanum, have been taken to cure the "phthisic!" And yet according to Dr. G., to little or no purpose;—nay, to a purpose worse than none.

But what then? Shall we turn away from physicians, as if they were of no service? Let us, rather, turn away from our unfounded reliance on medicine to cure that which we ought to prevent. Turn away from the physician? Why not rather employ him to teach us the art of preventing that which it costs us ten times as much to cure? Say you, he will not give us the information? Have you sought it at his hands? Have you even been willing to accept it when he has offered it? To whom are you indebted for the information contained in the foregoing quotations? To whom, indeed, but to a medical man—one of the very fraternity whom, in these days of skepticism, many are so much inclined to despise?

Say not, we repeat it, that physicians are unwilling to teach the community the art of preventing disease, till you have tried them. They cannot, of course, compel your attention to the subject; nor should they. But make the demand of them, on behalf of yourselves and your children, and depend upon it, you will find them more ready to the work than you suppose. Or if otherwise, that demand for an article in the market which is always the precursor of a supply, will lead them to qualify themselves for it.

Medical men, were they what medical men might be, and what it is for the interest of parents and children they should be, are very far from being too numerous. There is work enough, and more than enough for them all to do—work, too, for which the community can well afford to pay. Do you ask what it can be? Study anatomy, physiology, hygiene, and see that they are taught in all our schools and seminaries, from the lowest to the highest of them, and you "will then know."

COLD BATHING.

A THOUSAND questions are asked, by the uninformed, respecting cold bathing. Should it be commenced as soon as a child is born? Should it be continued all winter? Is it advisable to continue it during the progress of a cold?—a fever?—the measles?—the kine pox? &c.

Now all these questions would be easily answered by the diffusion of a single correct principle. The cold bath is not only safe, but invigorating—and hence salutary—whenever it is so used as to produce a full reaction; that is, a speedy and complete return of warmth and the activity of the functions. If this reaction is produced, it is as safe in fever, measles, kine pox, or even small pox, as in any other circumstances. It is as safe to the child of a day old, as to the man of thirty; and to the old as to the middle aged or the young. The only question is whether a reaction will follow. But this must be left to the judgment of those concerned, and to experience. Water may be applied to small portions of the surface, or even to larger portions for a moment; and if followed by a reaction, may afterwards be applied more extensively or more thoroughly.

But the great difficulty in the public mind is the *want* of this principle. Hence at every corner they pass, they have questions to ask, such as are indicated at the beginning of this article. Let us then briefly reply, in the detail which is demanded.

1. In general, new born infants should not be *immersed* in cold water, at first. Indeed, whether we immerse them or apply the sponge, it is better that the water should not be of a temperature much lower than that of a child's body, or about 98 degrees of Fahrenheit. It should be made a few degrees cooler every day—taking care to se-

cure a reaction—till in a few weeks most children will bear it of a temperature of 60, or even 50 degrees.

2. Except in the case of young infants or feeble adults, it should be continued all winter. Singular as it may seem, the reaction, in the vigorous, will be quite as certain as in the summer;—perhaps a little more so.

3. If carefully managed, it will generally do more good than harm even in a cold. Most colds are attended with a degree of fever, especially in their early stages. But there is nothing like cold water, externally and internally, in fever.—This answers not only the third question above propounded, but also the fourth.

With respect to continuing the cold bath during the progress of measles and other eruptive diseases, there can be no possible harm in it, if we are sure it does not overpower and prevent reaction. In a school near London, it was continued every day, through the whole course of the measles, and with apparent good effect. The secondary effects of the disease, as they are usually called, did not make their appearance in a single instance. Nor was there any necessity for medicine.

PHYSICKING OFF CHILDREN'S DISEASES.

The strange propensity prevails, every where, to use medicine in some form or under some plea or other. The smaller complaints, even of infancy and childhood, such as measles, mumps, whooping-cough, &c., which all admit should, during their progress, be trusted to nature, must be at least physicked off in the sequel.

A few months since the family of a sensible neighbor of ours had the measles, and were getting on with it, as might have been expected of a temperate and comparatively healthy family, very well. "I suppose," said the father one day, "that it will be necessary to take a little mild physic, in the winding up of the disease."

Physic, we replied, for what purpose would you give physic?

"Why, I have always been told that some loosening or opening medicine should be taken, after the measles are fairly over."

If there is costiveness or any other obstruction, the question might indeed be raised whether medicine ought not to be used; but if all is well, as I understand to be the case in your family, I cannot see any necessity for using medicine.

"But I have always supposed other diseases were apt to set in, such as inflammation of the eyes, brain fever, or dropsy, unless pains were taken to keep the bowels open and free."

This, I am aware, is a very common opinion; but it is wholly unfounded. The best way is to let well enough alone, as the saying is. If a child is getting along well enough with the measles, or if after having got through with them he is well enough, why should we interfere and give medicine?

Besides, what is most wanted, in the sequel of measles and all other diseases, is full strength and vigor. These are the best security against the setting in of other diseases. Whatever diminishes the general strength of the system must do harm. Could it be proved that there were present, in the first passages, (the alimentary tube,) irritating substances, whether fluid or solid, the removal of these, if done quickly, would not diminish the general strength of the system, but on the contrary would add to it. In all other cases, however, medicine would lower the tone of the stomach and of the system, and tend to invite disease, rather than repel it.

What was the effect of this conversation on the mind of this neighbor, we never knew. The great probability is, that he conversed with his wife on the subject, and finally with his family physician; and that mild cathartics, such as ignorance says will do no harm if they do no good, were recommended and taken. And if in consequence of the loss of strength or tone, induced by the medicine, weak eyes or any other evil followed, it was charged to the measles, and not to the medicine.

How long will it be ere we shall learn that the correct and healthy play of all the parts and functions of the system is not only the best preventive of disease, but also the best corrective! It is to ensure this "correct and healthful play," that the use of medicine ever becomes legitimate or desirable. But it is not always as easy to foresee that such will be the effect of a given substance as most persons suppose. The best physicians very often misjudge in this matter, and do more harm than good by their interference; what, then, is likely to be the consequence when *they* interfere who are a thousand times more ignorant?

That physic, as it is called, is often given in the sequel of disease with apparent success, is undeniable. Why, then, will it be asked, *this appearance* of success? Because a reaction in the system having already commenced, the depression of a single dose of laxative medicine is only temporary; and the patient soon rises again. Mankind, says an aged physician of some eminence, are tough; and one must think so, who considers, but for one moment, to what an extent poisonous drugs are in daily demand in our country, and to what an extent they are swallowed, at the suggestion of ignorance in the guise of false experience. This dosing and drugging is not so much the effect of downright villany, as is usually supposed. Let correct principles be instilled into a single generation, and the use of drugs and medicine will greatly diminish. We do not say it will wholly disappear, for *the disposition to do right* does not, in this world, at least, always keep pace with *the knowledge of what right is.* Still there would be great gain in the end. The more the truth can be spread out before the world, the more we enlarge the domain of conscience; and if in this respect we do not witness any *immediate* good results, we may hope for a harvest of good at a period more or less remote.

REFORM IN DRESS.

Much may be done to reform society in regard to dress, by correct physical education. Not indeed by that kind of education which wholly misapprehends or perverts the child's opening nature. Not by that education which stupifies us at the threshold of existence—which infuses coffee, tea, and other narcotics into the legitimate food of the child, till it has not life or spirit enough to demand exercise. Not by that kind of education which consists in dealing out paregoric, or laudanum, to benumb the brain and nerves, so that the mother can employ or amuse herself elsewhere. Not by that kind of education which consists in leaving children at home, with servants or other persons, while we ourselves attend the concert, the circus, the theatre, the assembly, or the ball, and remain there all night, and endeavor to quiet conscience by calling it exercise. Nor by that education which sends our daughters thither, and prevents their rising early in the morning, and handling the broom and duster, or walking abroad briskly in the open air, lest they should be vulgar. Nor yet by aid of half a dozen or a dozen ligatures about the body or the limbs, as if it were our object not only to impede motion in general when we walk abroad, but also to prevent it wherever we may be.

I have shown in a former lecture,* that the skin is a curious and highly important organ, and that it has important functions or offices to perform. Now these functions cannot be performed without free and liberal motion. But how can that skin act freely which is so compressed that it can hardly act at all?

If there were no other argument to be brought against having our dress too tight, except that to which I now refer—the fact that it compresses several square feet of the surface of the body in such a manner and degree, as to prevent the skin from performing its proper office—this alone should be sufficient to banish the custom forever. Especially should it be so with christian mothers; and above all, in the education of their children.

True it is that in speaking thus we are apt to reach the conscience of no one individual, because all appear to have a sort of vague belief that for themselves, they do not dress too tightly. I have seldom found an individual who doubted that lacing the body too tightly was an evil; but yet I have seldom found any one who confessed to the fault in her own case. All or nearly all suppose they lace in moderation only.

Now as surely as the chest is lined throughout by mucous membrane, and covered with skin, just so surely is the action of both these membranes impeded by the dress of nearly every female member of society; and by that of no small number of the other sex. It is not tight lacing alone which is objectionable, but *all* lacing. In this respect I must not hesitate to declare the whole truth.

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* This article is extracted from a manuscript lecture on "Exercise," which is usually preceded, in the course, by one on Cleanliness, in which the skin is very minutely described.

I say, therefore, to people generally, You certainly dress too tightly, especially about the chest; and whether you suffer any present inconvenience from it or not, you must as certainly suffer from it, sooner or later, as you exist.

It is not the skin alone which is injured by compression; it is the muscles, the bones, the cartilages, the heart, the liver, the stomach, and especially the lungs themselves. More than even this. It is all the organs or parts of the system which sympathize with the lungs. But will any one be able to mention any part of the system that does *not* sympathize with the lungs? Some, indeed, have a stronger bond of intimacy of this sort, but all are closely connected.

I cannot make this painful subject sufficiently intelligible without either diagrams or models. These are wanted to show the shape of the chest, first, as it should be, secondly, as it now is. Not merely as it now is in some instances, but as it now is, to a degree, in every instance. For not only do we find the shape of many a chest inverted—turned bottom upwards—but we find that of all or nearly all greatly changed from its normal or natural state, and instead of being smaller at the top and broad below, we find it gathered more or less like a purse at the base or bottom. Have you never seen busts of the Grecian and Roman females, especially the former? Have you not even seen—some of the oldest of you, at least—just within your remembrance, here and there a grandmother of the last century? Then you have seen chests and the representatives of chests such as are seldom to be found now. Nor has the mischief ended, I repeat it, with one sex. It is impossible for females to be degenerating as females now are, from errors in dress and other multiplied infractions of God's natural law, and the whole race not suffer by it. We are all deteriorating, at least physically; and tight dressing is one of the causes.

And if consumption and scrofula, and heart, stomach and liver diseases are increasing with rapid strides among us, this, too, is the result, in no trifling degree, of the same cause. The mother, in consequence of a feeble organization, and especially a slender and feeble chest, transmits to her children a tendency to the same state; and they almost as surely fall into consumption or scrofula, as effect, by the laws of the great Creator, follows cause.

Mothers, then, be admonished. The world rests, as it were, on you. Shall it, or shall it not rise? It has fallen by woman, so we are told; if ever raised again, it can hardly be raised without her influence.

In our dress, not a pound weight—no, not an ounce, were it possible to avoid it—should ever rest on the surface of the human body. Every where should the skin and muscles have full, free and perfect motion. Ligatures of any sort are inadmissible, whether at the neck, the chest, the loins, or the lower limbs. Perhaps no error, equally small, is productive of more suffering than the custom of wearing ligatures—under whatever name—around the leg. Who that understood the philosophy of the circulation and of the skin, would dare to do this? He might as well strangle himself or cut his throat, provided it were done slowly enough, as tie up tightly either that or the lower limbs. Better strangle ourselves, we had almost said, than tie up or compress the chest.

THE MOTHER'S MEDICAL GUIDE.

This book, long ago announced in the Library of Health and in the Boston Medical and Surgical Journal, has at length made its appearance. It is published by T. R. Marvin, of this city. Besides a preliminary address to mothers, it has about eighty separate articles or chapters, treating of as many different forms of disease. It is a volume of 314 pages, with a frontispiece.

The object of this volume—which has been nearly two years in preparing—is to aid mothers in the physical education of their children. It is not to set them to giving medicine, but to teach them to avoid any such necessity. It defines, or attempts to define the limits to which the mother should go, and tells her where to call for aid. It is, in truth, if no mistake has been made, precisely what was wanted in the non-professional world. Not that we have occupied the whole ground; for we have not touched the subject of adult disease, except incidentally. Guides to Health for other classes of the community—of the same general character—may or may not follow.

The following are a few paragraphs of the introduction to the Mother's Medical Guide. They will enable the reader to form some idea of our main intention.

"It has been said by President Lindsley of the University of Nashville, that there is much 'murderous quackery' abroad, even among regular-bred physicians. He takes 'for granted that every half-educated physician'—and many such there are among us—'who succeeds in getting a reputable share of practice, must have rid the world, rather prematurely, of some dozen or twenty individuals, at the least, in order to qualify himself for his profession.'

Now this assertion, strong as it is, was not made hastily. It came from a source sufficiently respectable to entitle it to consideration. And though the facts on which Pres. L. bases his conclusions are undoubtedly more numerous in the valley of the Mississippi than eastward of the mountains, yet even here I believe he is quite within the bounds of strict truth. I believe that for every generation of medical men—extending through a term of forty years—we send out, in the United States, some five or six thousand, each of whom succeeds 'in getting a reputable' practice—not, of course, intentionally, but in his ignorance—by ridding the world of at least a dozen of its citizens.

This, I grant, is a serious charge; and it is not made without regret. It becomes necessary, however, in order to meet and prevent the evils to which it refers. For remember that if the corps of half-educated physicians of our country slay 60,000 citizens every 40 years, or 150,000 every century, or 1500 a year, it is highly probable that the army of those persons who, without being *so much* as half-educated, make, vend, or prescribe for the sick, destroy a much greater number. And then, again, remember one thing more—that there is a class of citizens who carry a still higher hand in the work of destruction, direct and indirect, than either of these: I mean uneducated mothers.

Let the reader reflect, for one moment, on this melancholy picture. Let her think of half a million* of individuals destroyed in the United States every century, at the hands of licensed and unlicensed ignorance and quackery. True, it is only one person a year in every 5000 inhabitants—some 16 or 18 in a city like Boston—but this is a destruction which is quite unnecessary. I suppose, however, my estimate is quite too low; and yet, even thus low, the results are, in the aggregate, not a little startling.

These, however, are by no means all, nor the worst, results of ignorance and quackery. It is not he that *dies* by malpractice, alone, who suffers, or indeed, who suffers most; but he who *lives* under it. The sufferings of those who die are often limited to a few weeks, sometimes to a few days; while they who survive, under the hand of ignorant interference, are not only much more numerous than those who die, but the victims of more prolonged, not to say more intense sufferings. And, in the infliction of these prolonged sufferings, the mother, we may be sure, comes in for a pretty large share. Sometimes, moreover, she is a co-worker—a sort of companion in crime—with others. She could not dose continually with elixir, ipecacuanha wine, laudanum, worm-lozenges, calomel, picra, salts, rhubarb, cordials, pills, matchless sanatives, panaceas, and the mighty paraphernalia of modern quackery, if there was no one to make, vend or sell these two edged instruments."

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* That is, 150,000 by half-educated physicians, 150,000 by those who are not *so much* as half-educated, (or quacks,) and more than 150,000 by mothers themselves; amounting, of course, to from 450,000 to 500,000.

POISONING.

"Mr. Robert M. Thayer," says the Boston Daily Mail, "of Braintree, in this state, died a few days since, and his physicians gave it as their opinion that his death was caused by a wound received while assisting in skinning a neighbor's ox, which died of what is called the *black murrain*. Receiving a slight cut in his finger, with the knife used in the process of skinning the ox, the poison was thereby communicated to the system, which caused mortification and death."

But there is a tale yet to be told. The flesh of the same ox, it is said, was sold to a sausage maker in Roxbury; but whether to manufacture into sausages, to fatten other animals *from which* to make the very precious commodity, or for some other purpose, remains to be told.

Or at least we are ignorant, entirely so, with regard to the facts.

Now it may be already known to most of our readers, that poisoning by the use of sausages is no uncommon thing. When made of blood and liver, as in some parts of Germany, they appear to develope a destructive poison—one which causes frequent death. It is stated by Christison, on the authority of several German writers, that between the years 1793 and 1827, no less than two hundred and thirty-four cases of this species of poisoning occurred in the kingdom of Wurtemburg, of which one hundred and ten proved fatal.

Although we know nothing of the Braintree case beyond what we have stated above, we do know that diseased animals—such as those who butcher them would not themselves eat—are often sold in every considerable market in our country. Hundreds and perhaps thousands of swine, sheep and cattle, to say nothing of poultry, which no farmer in the country would think of eating, but which are *good enough to sell*, find their way to the Boston market every year, and are devoured by our citizens.

How much to be desired is a state of human society in which every individual should truly love his neighbor as himself, and manifest this love, not merely at set times, or on particular occasions, but in all the relations and concernments of life. In such a state no person would be found selling to another person that which he was not willing to use himself. If an indifferent—we will not say poisonous—thing *must* be eaten or used, the true friend of man and God—the true lover of his neighbor—will prefer to eat it himself rather than permit his neighbor to eat it.

We are almost tired of noticing—still more of noting—the cases of poisoning which occur in these days. For scatter the light of science as much as we may, and appeal to conscience as much as we will, it is not till the principles of the gospel of Christ can be made to take deeper hold than they yet often have on the hearts of his followers, that we can reasonably hope for any considerable improvement. However, enlighten we shall, or at least attempt to do it, whether the light is received or rejected. Of course we hope for the best in our efforts.

We wish to add, in this place, a case of poisoning by lead, though we have so often directed the attention of our readers to the dangers to which they are exposed from this article—especially in our volume for last year—that we do it with a good deal of reluctance. It is from a southern paper:

"Recently a miller, near Mobile, for some purpose or other poured several pounds of melted lead into the eye of the runner stone. The lead becoming loose and working between the stones, was ground up with the corn. The meal which contained the lead was consumed on the plantation of Mr. James G. Lyon, and a number of his negroes were poisoned by it, some of whom died, while others were palsied and rendered altogether hopeless. It is said to be a common thing for millers to use lead in this way, and the misfortune here related ought to be a sufficient warning against it. A similar accident occurred lately in Europe."

CHAPTER OF INTELLIGENCE.

Burgundy Pitch Plasters.—A young woman in Herkimer village, N. Y., who had suffered severely for some time from pain in her left side, and had tried almost all sorts of applications to no purpose, at length applied a plaster of Burgundy pitch. Upon the removal of this, one day, the point of a needle was discovered protruding through the skin, an inch and three quarters long. The needle was soon and easily extracted. From its appearance it must have been swallowed several months before; although the young woman was not conscious of swallowing it at all.

How wonderfully *drawing*, many will say, this Burgundy pitch plaster must have been! And nothing is more natural than such a conclusion, by those who know nothing of the powers of the human constitution. Neither this plaster nor any other can any more draw a needle out of the human body, than out of the body of a tree. It is nature that does the work, and not the plaster. She *pushes* out the needle, while the plaster or dressing which happens to be on at the time, gets the credit of *drawing* it out. All our modern quackery flourishes only because the public ignorance of the laws of health and life affords exactly the soil in which it loves to germinate and shoot forth.

Sensible Men not always Intelligent.—The following anecdote, related by Mr. Combe, is worthy of universal attention; but we particularly commend it to those who have the care of halls, churches, schools, factories and prisons. Mr. Combe was lecturing on Phrenology at the Masonic Temple in Boston, when the circumstance occurred to which he refers.

"A large stove had been lighted in the private room at the Masonic Temple adjoining the hall; and the coals had burned into a bright red heat just before I entered. I chanced to look at the construction of the stove, which was large, wide and open in front, and I could discover no aperture for allowing the smoke to escape. I asked my assistant, a young gentleman of Boston, if he could explain how it was disposed of. He turned a small iron projection, and instantly a damper revolved and presented an aperture for its escape. It appeared to me that this damper had been deliberately closed by a very *sensible* man, who had the charge of the Temple, after the fire had come to a red heat, under the notion that there was no longer any smoke, and that the use of this contrivance was to prevent the heat from escaping up the chimney. The fire was burning vividly, and pouring into the room streams of heated air, charged to the maximum with carbonic acid gas! Some portion of the bad health which is complained of in America arises from imperfect ventilation, and occasionally, perhaps, from such practices as this."

Hot Coffee.—A daughter of Mr. Skillings, in Portland, two years and five months old, lately fell upon a pot of hot coffee, and was so badly scalded that she died the next day.—It is not long since a similar occurrence took place in Roxbury, but a few miles from this city. Those who use no hot coffee will of course escape danger from this quarter.

Children Burnt.—Among the blessings of cheap cotton goods, is the facility it affords for burning children to death. We seldom take up a paper which does not contain details of this sort. A late National Intelligencer says that two children in Washington, one of them *two* years old and the other *one*, were lately so badly burned by having their garments take fire, in the absence of their mother, that one them, if not indeed both, was not expected to survive long. When will security for life and health be valued as high as it ought to be?

The Wine Question.—On this subject several papers among us, as well as several strong men, are beginning to speak out. Wine, 2000 years ago, was of two kinds, fermented and unfermented. There is no command in the Bible which requires us, the people of 1843, to receive a drop of fermented wine into our stomachs, while in health, for any purpose whatever. Show us such a command, says the Maine Temperance Gazette, and "*we have not another word to utter.*"

True Basis of Moral Reform.—We learn from the Oberlin Evangelist, that at the organization of a new Moral Reform Society in October last, at Warren, Trumbull County, Ohio, the following highly important resolution was passed unanimously:

"Resolved, that in view of the alarming state of degeneracy and the amount of disease and suffering in the community, we are called upon to use all proper means to enlighten our own minds and the minds of others in regard to the laws of life and health—that we will discountenance such modes of dress and living as tend directly to degenerate and render the human family physically, mentally and morally debilitated—and that we will use all lawful means to promote the cause of physiological reform, considering this essential to the ultimate success of Moral Reform."

Statistics of Impurity.—One physician in the most healthy and moral part of this commonwealth, has prescribed for 30 victims of impurity, in two years; and these only of one sex. Taking this and other facts within our reach as data, it is greatly to be feared that there are at this moment, in the United States, at least 250,000 of these sufferers—saying nothing of a much larger number on the high road to suffering, but who, as yet, do not believe the statement of the Bible, that there is a way that seems pleasant but the end thereof is death.

Graham's Quarterly Journal.—The second number of this curious work has at last made its appearance. It is made a periodical to save expense in its circulation, and was undoubtedly designed to be regularly issued, every three months. Yet owing to difficulties under which the author has labored, it has required more than eighteen months to bring out two numbers; and may require as many more to bring out the other two. But we have the repeated and strong assurance of the author that it shall appear at some time or other.

Now this work, though a journal, is well worthy of being called, as it is on the cover, "the Philosophy of Sacred History." Not only does it develope the true doctrine—rather authority—of the Bible in regard to Flesh Eating and Wine Drinking, but it presents rules of interpretation or principles which throw light on many other important points and disputed questions. Without saying or supposing it is a perfect work, we do say that it deserves a wider circulation than it is likely to have. Every theologian, every friend of temperance, law or purity, ought to receive and examine it. How strange it is that the fooleries of the day sell readily by thousands, while a work which, at the worst, is worth millions of them, can hardly be sold by hundreds!

TEACHER OF HEALTH.

FEBRUARY, 1843.

PREVENTION, THE GREAT WORK.

We find in a late number of the Advocate of Moral Reform, in the "Extracts from the Report of the Bethel Missionary," the following statements:

"But after all, the *great* work to be done is *prevention;* and unless the ministry, the church and the community at large wake up to this mighty work, and the warning cry is heard as the 'voice of many waters,' ruin will not only continue, but increase. Indeed, already the turbid waters of licentiousness are rolling their desolating tide over the very sanctuary of God. Its victims are not only in the world, but the church and the ministry are most painfully liable to fall, as is shown by facts that are constantly being developed."

We are not surprised to find the friends of reform compelled, more and more, to admit the importance of prevention; the wonder is that they have not admitted it long ago, and governed themselves accordingly. A greater wonder however is, that those who see the truth as it truly is, are not moved by it to do more than they have ever yet done for their own families, and the families of those around them.

It was a thorough conviction of the importance of prevention, that led us from the medical profession to the school room, and afterward drove us from an almost thankless task, in the ill-constructed, ill-ventilated, ill-furnished school house, to the still more thankless work of endeavoring to hasten the day of better things by our pen. It was this conviction that led us to labor ten years on the physical department of the Annals of Education, as well as four or five years in editing Parley's Magazine. It was the same conviction that led us to establish the "Moral Reformer," to aim at the extirpation of vice by the promotion of health, and by endeavoring to diffuse a knowledge of the structure, laws and relations of the human constitution. In the same spirit, and with the same ultimate end in view—moral reform by physical means—we have conducted the Library of Health six years, and are a "Teacher of Health" still. In precisely the same spirit we have prepared a considerable number of books for the use of mothers, school-masters, and the children and youth in our families and schools. For fifteen or twenty years we have pursued our course "through good report and through evil report," always neglecting or hazarding every pecuniary prospect, and sometimes sustaining such losses as might have wholly discouraged us had worldly reward been our chief object.

These things are not mentioned in the way of boasting, but to show our sincerity in the great work of prevention, and our determination to give our efforts this direction while life and health shall last. We trust we have drunk not a little of that philosophy—to give it a name no better—which teaches us to lay down our lives for the brethren. The external form of our efforts may vary, from time to time, as our estimate of the comparative importance of precept and example may vary, and as the surrounding circumstances in the good providence of God may be varied. But our purpose—the decision of the head and the assent and bias of the heart—is, like the Median law, irrevocable.

"Boasting still," will any reader say? We trust, if we know any thing of ourselves, that so far from having a disposition to boast at all, we are ready daily and hourly to confess our unprofitableness, and to acknowledge to God and man that we have done no more than it was our duty to do. We have only devoted ourselves, as every Christian is bound to do, entirely to the service of our great Master—doing good to his creatures in the best way with which we are acquainted. We only differ from other Christians—if we differ at all—in the mode of performing this service, or in the earnestness and perseverance and dependence on God which we carry into it.

That there is still a liability to fall—a *painful* liability, too, as the writer in the "Advocate" calls it—we do not deny; we are even free to confess it. There is no security for us but the mighty power of God, and our earnest and zealous co-operation with his influences. It is with a firm reliance on the Ruler of the heavens that we make all our decisions and every surrender.

We may be much mistaken, but unless we are so, prevention is the great work to which all good people are slowly coming. Do not all sects of Christians tacitly admit the importance of prevention, by the zeal which they manifest in the cause of Sabbath schools? Is it not admitted in the preparation of books and papers for the young by some of the most gifted minds in the community? Grant that even these books and papers come too late, for the most part, to prevent evil, and that they are, after all, rather corrective in their tendency than preventive; still they are *designed* for prevention, and the design itself indicates an approximation to a better state of things than what has hitherto existed.

In the cause of temperance—what is it but a virtual admission of the value of prevention, which leads to such strenuous effort as is beginning to be made to enlist children and youth in the cause? What but this has led to juvenile temperance societies, and cold water armies, and cold water magazines? Grant, as we must, that a proportion of these efforts come too late—the love of excitement having become too firmly riveted prior to all this to be at once eradicated; and that though youth may be carried by impulse for a time, this is not to extirpate a depraved appetite, still the attempt to come nearer the sources of depravity augurs favorably for our race.

Just so, also, as we have partly seen, in the cause of moral reform. The enlightened friends of this cause—more perhaps than those of any other—are beginning to see clearly in this matter. They know, full well, that their former operations have been but as the cutting off a few fungous excrescences from a tree whose whole juices are corrupted, in the vain hope of extirpating the poison; or as the effort to exhaust a noxious stream, merely by emptying its bed at its mouth, while its sources remain.

So, to some extent, we would humbly hope, in the cause of freedom. The wise are beginning to find that the true way of ridding the world of one of its greatest curses, is to raise up freemen, by families, churches and nations. Let this be done—let true freemen, to repeat the sentiments of the excellent author of "Spiritual Christianity," be raised up in but three large communities—and slavery would soon disappear from the earth.

Finally, and above all, is prevention not only worth more than cure, but absolutely indispensable in the work of promoting human health and longevity. We have seen enough and too much of attempts to change the habits of the old or even the middle aged. Can the Ethiopian change his skin, or the leopard his spots? we have more than once been led by the observation of facts to exclaim. Physical changes—permanent ones, we mean—are almost as hopeless as Dr. Priestly insisted moral ones were. Our hope is in prevention; in training up in the way in which they should go, a new generation, that when they are old they may not depart from it.

[We shall conclude this subject in our next number.]

USES OF THE MANIKIN.

In one of the volumes of the Library of Health we have given a tolerably full account of that ingenious piece of French mechanism—the artificial man, or Manikin. By means of this manikin, the Brain, Eye, Ear, Heart, Lungs, Liver, Kidneys, Bones, Muscles, Arteries, Veins, Nerves, Stomach, and large and small Intestines—indeed *nearly* every part of the system—are faithfully represented and exhibited. Even the natural size, form, color and situation of the parts are preserved. It is, in truth, a collection of several hundred distinct pieces, most ingeniously attached to each other by wires, and when united, forming a mass which, with slight exceptions, represents a full sized man. It may be built up and taken down by piecemeal, with the facility with which a child can erect and demolish a cob house.

The great practical use of the manikin is to assist in teaching Anatomy and Physiology to the children and youth in our colleges, academies and large schools. It is too expensive, at present, for single families; though it may, by possibility, be manufactured more cheaply hereafter. The material is said to be *chewed paper*, or at least paper pulp; and is therefore, if kept dry and carefully handled, not at all perishable. The cost, at present, is about $800; though it was originally about twice that sum.

As yet the manikin is by no means common in this country. In a few instances it is found at the medical schools and colleges; and in a still smaller number of cases it may be found in the possession of physicians and learned men. We know of but two popular lecturers on the manikin—Mack and Lambert, who lectured lately in Lowell, Boston, Providence and other places, and Dr. Cutter, who has lectured in Springfield, Dedham, Roxbury, and in some of our schools and seminaries.

Such is the construction of the artificial man, that it may be exhibited with the utmost propriety to mixed audiences, and to schools comprising both sexes. This, indeed, is one of its chief excellencies. Years, if not centuries must pass before the customs of society will permit actual dissections for the benefit of promiscuous assemblies, or even schools generally, however select. The strange practical belief, that to use the dead for the benefit of the living is a species of sacrilege, and that it is well pleasing to the Divine Former of this wonderful mechanism to bury it deep in the earth, by hundreds and thousands, as soon as the machinery stops, has hitherto obtained, and seems likely to prevail for a long time to come, and science and health and piety—the well being of man and the cause of God—must suffer the consequences.

On this account, as well as many others, we hail the introduction to society of the best substitute for the Divine machine itself, the manikin. The bodies of the animals below man, we are aware, might be of some service, even when no opportunity should occur of comparing them with that of their constituted lord. But they do not answer every purpose, even when aided by skeletons, drawings, wax models, and other preparations. Besides, these last, though not quite so costly as the manikin, are still too expensive for general use.

One of them, if not more, ought to be found in the collection of every university, college, high school, academy or select school in the country. No young man or woman should be considered as properly instructed who is not made familiar with all the practical anatomy, physiology and hygiene which can be taught with the aid of the manikin and suitable and appropriate drawings. They may add something to the expense of instruction; unless, indeed, part of the flummery of a fashionable course can be dispensed with for their sake; but perhaps it ought to be so. It is as important to the cause of morality and religion, now, to devise means for pouring the treasures of voluntary beings into the modern "temple of the living God," as it was in the days of Solomon to devise a plan for inducing the Jew to part with some of his treasure for a less noble purpose, in itself considered—for the sake of the temple at Jerusalem. One design of both, in their various dispensations, is to free man from his native selfishness, and lead him into the world of benevolence. All therefore that a parent can be induced to expend in the education of a child, generally speaking, is as conducive to parental happiness, independent of the advantage, real or supposed, which it confers on the child, as it is to the latter himself.

Great complaint, we know, is sometimes made about the increasing expenses of instructing our children and youth. This is perfectly natural; but not, therefore, perfectly right—indeed it is positively and greatly wrong. We ought to bless God, rather, for the opportunity it affords us of enriching ourselves while adding to the true and only real wealth of others. What though we may be compelled thereby to part with some of the physical indulgences which the tyranny of fashion has rendered not only gratifying to our appetites, but almost as necessary as our daily bread? Is the call unreasonable? Is it unreasonable that the Divine arrangements should serve to make us better, when our own arrangements, without adding to the present aggregate of our enjoyments, would serve to deteriorate our whole nature, mental and physical?

But what is the self-denial to which we are called, in order to educate our children? The Jew, for the sake of building a mere external temple, was burdened to an extent which appears to have made the nation ready to revolt, and indeed actually produced a revolt as soon as the popular reigning monarch was out of the way. Have we not a thousand luxuries of life still left us of which the Jews, though they ate and drank and made merry, knew nothing in the days of Solomon? And shall we be forward to complain, who only part with a few bodily luxuries for the sake of building, in those who come after us, what we lament the folly of neglecting to build in our own case—an interior or spiritual temple?

Whether, however, we ever compare ourselves—as was doubtless a prominent part of the Divine intention—with the temple building Jews or not, one thing is certain, that we are called, whatever may be the hazard or cost, to a work as much more glorious than that at Mount Moriah, as the soul of man is more glorious than the mightiest pile of mere cedar or stone that human art and industry ever reared. In this view, what is an expense of $700 or $800 for a school, once perhaps in a quarter of a century? Would it tax us half as severely as the indulgence of the proprietors for twenty-five years in coffee, tea, or even tobacco? Let us hear nothing more then of the expense of the manikin, in a world where, in the language of Dr. Channing, " money should be poured out like water " for the great and godlike purpose of elevating the race.

REARING CHILDREN IN THE CITY.

In the treatise of Dr. Andrew Combe on the Physiological and Moral Management of Infancy, at page 69 of the second edition, we find the following sentiments:

"When we contrast the robust constitution of a healthy parent's child in the country, with the feeble organization of that of a delicate mother living in the midst of the enfeebling dissipations of a capital, can we imagine for a moment that *chance* alone has given health to the one and infirmity to the other, and that the mode of life of the parent has had no share in the result?

"If we cannot, does not that mother incur a heavy responsibility who thus, whether from ignorance or from the selfish pursuit of immediate pleasure, perils the safety and permanent happiness of her offspring?

"If there is one duty more paramount than another, it is the obligation on the part of the mother, from the moment of conception, to secure for herself, by every possible means, the highest state of mental and bodily health of which her constitution is susceptible."

But is it so, some reader will inquire, that mothers may not live in the city? If not, how is the city to be sustained? Besides, how can Dr. Combe himself continue to reside with his family in the city of Edinburgh? Surely he is bound to let his example confirm what he teaches by his precepts.

Now it is to be observed, in the first place, that Dr. C. does not exactly say, whatever his real opinion may happen to be, that a child will suffer from merely being born and brought up in the city. His language is, "living in the midst of the enfeebling dissipations of the capital." We are to suppose that by living in the midst of dissipation, he includes the idea of the mother's coming within the range of its influence. But cannot a mother live in the city without mingling in its scenes of dissipation, especially under the circumstances to which he most obviously alludes?

As to Dr. C. himself, how do we know that his family reside in Edinburgh? There are hundreds and thousands of business men who date all their correspondence, &c., at Boston, who reside in the adjoining towns—some of them as remote from city influence as could be desired. It may be, for aught we know, that the family of Dr. C. reside in the more healthy environs of Edinburgh, or even eight, ten or twenty miles off. Besides, the circumstances of Dr. C.'s family, if indeed he has a family, may not be such as to bring them within the rule which he lays down for others.

If then people may live in the city without joining in its dissipations, and if some may even join in its gayer, not to say more dissipating scenes, without subjecting themselves or others to the particular evils alluded to by Dr. C., shall we be compelled to regard him as a downright foe to the existence of cities? He may be so; but it will be soon enough to convict him of such a hostility when there is evidence to be brought against him.

Yet can it be denied, after all, whatever may have been the intention of Dr. C., that the influence of the city in its best circumstances, is more or less unfavorable? It is impossible that its air should be as pure as that of the country, or its water, or even its food, drink, exercise, recreations, &c.

We speak here, however, of cities as they are, and not of cities as they might be made. Mr. Dick in his work entitled "Mental Illumination and Moral Improvement of Mankind," has shown most clearly, that while as yet we have no cities fit for the residence of families, it is not impossible in a better state and age of the world to have them. He has even described such a city as might be built without materially conflicting with health or Christian principle. Of these improved cities we may perhaps speak at another time.

To recur to the consideration of cities as they now are. On this point we have but one opinion; nor do we see how the individual who knows any thing at all about them can have more. Take the healthiest, even, with which we are acquainted, and the very healthiest parts of them. In what respect are they fit for a Christian residence?

Is it in respect of air? There may be a few streets in the immediate vicinity of Boston Common—that mighty purifier, like a great pair of lungs, to the Tri-Mountain—which are tolerable. But with this single exception—if indeed this is one—where do we find the air of any considerable city as pure as it is in the country? But if the purest parts of the purest cities are, in this respect, doubtful, how is it with the rest?

We have expressed doubts about the purity of city air, even around Boston Common. For who does not know that no longer ago than last year, thousands of loads of refuse coal and dirt, including fragments of all sorts of substances, animal and vegetable, some in a state of decomposition, were emptied on the Common, especially on the mall? Was the air which came in contact with this mass of dirt and filth as healthy as the balmy breezes of the hills and vales of the distant towns? And who that has seen hundreds of carpets, with their accumulated filth, being cleansed at once on this grassy spot, will wish to live on the streets contiguous to it? Besides, how many hundred loads of offal and manure pass through these very streets daily, to exhale their odors as they pass, for the public weal?

Is the water of our cities, in any instance, fit for the wants of a Christian residence? Not certainly in any whose water has been chemically examined. The water brought in lead pipes is usually, if not always, poisoned in some degree; and the water of the city is, we believe, worse than poisoned. If any one doubts on this subject, let him read for once the statements of Dr. C. T. Jackson, the geologist, and Dr. Dana, a highly scientific chemist, concerning the water of Boston and Lowell.

Is the food of the city such as it should be—such as we are willing to give to our children? Those who breathe pure air and drink pure water, and are favored with every thing else conducive to health, will not seem to suffer so much if their food is a little imperfect; but not so with the food where all other things are wrong.

We know well that some articles of food received into the city are of the very best quality. But as a whole, the perfect to the imperfect is hardly as one to ten. Who then will live in a place where nine tenths of every thing consumed is more or less deteriorated? Yet thousands and millions do thus live. Not, indeed, from a settled determination to rear families less healthy or moral than they might be; but from other motives. Selfish objects—the desire of property, rank or pleasure—lead men to the city, often before they have families; and they become entangled in the web of city influence, and cannot well escape. Others, while they admit them to be places of much moral and physical corruption, believe they can do more good in them than elsewhere, though it should be at the expense of themselves and their families.

We would hope, while we fear it is not so, that the last mentioned class is, in these days, somewhat numerous. For though there is, no doubt, much mistake made in this matter, it is pleasant to believe that the error is that of the head rather than the heart. We are not willing to regard Christian men and women as deliberately determining to sacrifice the health and the morals of those whom God has given them to train up for himself, merely for the sake of wealth, or fame, or pleasure. We would—we will—hope better things.

We are not, it is true, of the number of those who believe that the city will ever reform the country. Reformation, we are sure, must come from the opposite quarter. Grant, if you please, that a great city is like a great heart, sending out life blood to all parts of the system, still if the remote parts are not healthy, the centre never can be. The health of the heart will ever bear an exact proportion to the health of the extreme or capillary vessels. The city is replenished, from year to year, by the country; and were it not for this influx would, in time, perish.

These remarks are not made to discourage those who believe it their duty to reside, for the present, within the range of city influence, but to show them their danger, and lead them to guard against it. We have, however, one more object, which is, to lead those who have a sense of responsibility to God and man, to review the reasons which operate to keep them in the city, and be careful not to forego the health and happiness of their families for low or unworthy purposes.

HEALTH OF STUDENTS.

LETTERS TO A FATHER.—NO. II.

I WROTE you the other day, entreating you to do your best to have your son become a farmer. A thousand difficulties, I know, will be started in connection with this subject; some of which I propose, by way of anticipation, to meet, and perchance remove.

My son is *fond* of study, you will say; and is a boy's taste or preference to be wholly disregarded? By no means, is the proper reply to such a question. In general it is to be respected. But are there not tastes which must yield to our conviction of a better and wiser course? It is certainly so with our tastes and preferences in regard to food and drink. Would you give up a boy who had a natural fondness for exciting food or stimulating drink, and say, in reply to medical or other advice—Oh, he is *fond* of it?

The tastes or preferences at any age, especially at the age of ——, can be changed. It is true it will cost some pains. Whether it will be worth while to take the necessary pains, that is, whether you will be willing to take the necessary pains, will depend on three things—1. The practicability of the work. 2. The view you entertain of its necessity. 3. The value you attach to the life and health of your son.

But he is not only fond to excess of study, you will say, but opposed, perhaps unreasonably so, but yet strongly opposed, to the calling you name. Most undoubtedly; for who is not? Farming is considered as a kind of dog's life; and in a community where every one is disposed to labor as little as possible, who would select, willingly, an employment which he supposes among the most laborious that could be named?

I acknowledge the weight of the difficulties referred to, but believe they can be met and overcome. Do you ask how? The reply to this question will bring me to the main point of this letter.

1. Let your son know—if you yourselves believe it—that few men have more leisure for study than farmers; and that none are more benefited by what they do read and study, than farmers. Their mental food, like their physical, digests well; and as in physical matters, so in

intellectual, it is only what is digested that does much good.

2. Let him know, also, that farming is in itself easy, rather than laborious. I mean by this that it is comparatively easy; or once more still, that it is not so much harder, as a general fact, than other occupations, as is often believed. I mention this because you will probably raise an objection which I have not yet exactly mentioned, that your son is not robust enough for farming. Now it does not require the more robust youth to make farmers. Besides, the young who are not robust enough for the farm, are not robust enough for the school, or the study, or the counting room. There is no greater error abroad, than the very general one which implies the reverse of this. Put a feeble boy to the plough, the hoe and the spade, and his labors will gradually strengthen him.

3. Do not set down farming as mean, by your indirect efforts; viz., by exalting other things unduly. Never speak of the farmer—I had almost said, never think of him—as lower in rank than others. If you have occasion to place him and the merchant in contrast, endeavor to have it seen that the farmer is at least as good as the merchant or the professional man. How often do parents, in the little books which they procure for children, give the preference, even in the purchase, to the "happy merchant," or the young "lawyer," or "student," or "scholar!" And when they come to buy a book which has something in it pertaining to the farmer, how little does it interest them? When they look over the pictures with their children, how seldom do they call their attention to the mower, the reaper, the wood-cutter, the ploughman, &c. Or if they do this at all, it is always or almost always in a way which shows that they look upon them as plebeian concerns! What parent shows his children, by his eye, his tones of voice, his language, when he comes to the

agricultural picture, that he has a high regard for agricultural employments!

In our prayers, not merely at church, but in the family, how often do we plead for the welfare of every body but the farmer. I remember well of hearing many a minister in 1837, express from the pulpit a deep sympathy with the sufferings of our business men—our large dealers by sea and by land, &c. &c. But how seldom a breath of sympathy for the farmer! Yet the great burden of the suffering, after all, has fallen on the agricultural community. Or at least the tendency of things, as a whole, has been to *demean* the farmer and his concerns. And if there is a class of men with which we should express sympathy in our prayers, and for whose health, and enlightenment, and holiness, and freedom from embarrassment we of New England should pray and labor, it is the agricultural—not the professional, the mercantile, or even the mechanical or the manufacturing; though I grant all suffer greatly, especially the last.

In the midst of all this practical despising of agriculture and house keeping, it would be almost a miracle if our sons and our daughters should not prefer something else. But can we not refrain from all this? Can we not turn the tables, and, before our children at least, *look up* to the farmer, instead of *looking down* to him and looking up to classes of men whose interests and whose usefulness, as a whole, may not demand more strongly our sympathies than theirs?

You may say that this advice comes to you too late; but are you sure of this? Are you sure that though you may not be able to change your son's taste, you cannot so inform his mind and convince his judgment, that he may, by seeing the farmer through a more correct medium, be lead to correct his tastes and preferences for himself? Or if you cannot correct his judgment, you will at least, in the endeavor, correct yourself. A man who shapes his conduct according to the convictions of his sober judgment, and above all, does so in the fear of God, will not be long in bringing his tastes and preferences to bear in the same direction. "He that doeth truth cometh to the light."

I feel that what I have said may, from its very brevity, be unintelligible, and therefore liable to perversion. Would that you could see this matter as I do, or rather as I think God sees it. Your son might then be saved to himself, to his friends, to his country, to the world. He might be saved, I mean, to be more useful to all these than he ever will be otherwise. *Lost*, absolutely so, he cannot be, I well know. A—— is not lost;* and if —— were to follow in the same train—as I fear he must if he attempts to become a student—*he* would not be *lost*. He would still form a component part of the great kingdom of Jehovah, and peradventure be in a degree—a smaller one—still useful.

COMPARATIVE HEALTH OF THE SEXES.

THE following interesting calculations and notes on the recent census of the United States, are from a late Cincinnati paper. It is stated that there occurs, between 15 and 25, one death in 211; between 25 and 35, one death in 43; between 35 and 45, one death in 76; between 45 and 55, one death in 54; between 55 and 65, one death in 34; between 65 and 75, one death in 19; between 75 and 85, one death in 125; between 85 and 95, one death in 112; between 95 and 105, one death in 116.

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* Alluding to a young companion of the youth in question, who had died not long before.

The above shows a less proportion of deaths between 15 and 25, in proportion to those between 5 and 50, than the bills of mortality generally show.

From the age of 35, the proportional number of deaths continually increases, until at the age of 100 but few remain. The last census shows 759 above the age of 100. Notwithstanding the great number of those who die young, yet more than two hundred thousand white persons in the U. States are past the age of 70.

The laws of Life and Mortality between the sexes are very remarkable. They may be stated thus:

1. In the present condition of the white population of the U. States, the number of females born per annum is about twelve thousand less than the males. This determines of itself that polygamy is not a natural condition of man, and that the laws of nature and religion are the same—that one man shall be the husband of one woman.

2. At twenty years of age, the females exceed the males. This proves that between birth and twenty, the mortality among the boys has been much greater than that among the girls.

3. From twenty to forty, the men again much exceed the women; which shows that this is the period of greatest mortality among women.

4. From forty to seventy, the difference rapidly diminishes, the females, as in the early part of life, gaining on the males. This shows that this is the period of greatest danger and exposure to men—the least to women.

From seventy onwards the women out number the men. This shows, conclusively, that relatively speaking in comparison with men, the healthiest period of female life is the close of it. Absolutely, however, no period, to either sex, is so healthy as that of youth, the blooming period of boyhood and girlhood. The above deductions of statistical tables correspond with every day observations on human life. Women are exposed to peculiar hazards in the middle of life; but, in the long run, far the largest part of exposure, danger and risk, in civilized nations, fall on men in the active periods of life.

THE "FIDGETS."

Fidgets, as every one knows, is a term applied to an unusual restlessness, accompanied by a perpetual desire to change the position; but it may not be known to all, that Good, Darwin, and sundry other medical writers, have given it a place in their catalogue of diseases. Darwin calls it *jactitatio*, but Good, *dysphoria simplex*, or in other words, fidgets.

The cause of this disease, says Dr. Good, "seems to consist in an undue accumulation of sensorial power, which seeks an outlet, so to speak, at every pore, for want of a proper channel of expenditure. Thus every one becomes fidgety who is obliged to sit motionless beneath a long drawn and tedious story of common place facts, totally destitute of interest; and still more so, when he is eagerly waiting, and fully bottled up, as it were, to reply to an argument loaded with sophisms, absurdities or untruths, and over which he feels to have a complete mastery. So the high mettled horse is fidgety, that called out, in full caparison, and still restrained in his career, is panting for the race or the battle. "So the squirrel," as Dr. Darwin well observes, "when confined in a cage, feels a restless uneasiness from the accumulation of irritative power in his muscles, which were before in continual and violent exertion from his habit of life, and in this situation finds relief by perpetually jumping about his cage to expend a part of his redundant energy. For the same reason, children that are constrained to sit in the same place, for hours together, are liable to acquire a habit of playing with some of the muscles of their face, or hands or feet, in irregular movements, which are called tricks, to exhaust a part of the accumulated irritability by which they are goaded."

This fidgety condition of the human system is exceedingly troublesome, and is sometimes greatly increased in children by worms and numerous other sources of irritation. The species of worm called ascarides is especially liable to add to the inconvenience and suffering.

A course of cooling purgatives, it is said by authors, joined to warm bathing, and abundant exercise, will be found most serviceable. We would prevent the necessity of these, except the exercise and occasional warm bath, which are always salutary, not to say indispensable. Exercise in the open air is almost every thing; and this remark is particularly applicable to the condition of children at school. Dr. Darwin has by no means exaggerated, in speaking of their exposure to bad habits as a consequence of their fidgety feelings; nor would he have done so had he gone farther, and in addition to the danger of learning to bite the nails, pick the nose, &c., alluded to the tendency, along with other causes, of awakening *another kind of feelings*, which in children and youth should be suffered to slumber as long as possible.

There is no apology for the fashionable practice of confining very young children six hours or more to the school room, even if the seats were furnished with cushions and backs. Half the six hours of the primary and common or town school, ought to be spent in active sports in the open air.

TREATMENT OF THE JAUNDICE,

OR UNNECESSARY DOSING AND DRUGGING.

THE season is at hand in which thousands will be found dosing, in one way or another, for jaundice, real or supposed. Perhaps there is no complaint for which mothers, and nurses, and Indian doctors, and quacks of all sorts, have so many *certain cures*, as for jaundice.

In many parts of New England the herb celandine, infused or soaked in cider, is a famous remedy. In others, the excrementitious contents of the sheepfold are supposed to impart medicinal properties to the same fermented drink. In other cases millepedes have been swallowed—100 to 200 a day. Generally, however, cider has been deemed almost as indispensable, in cider countries, in the cure of jaundice, as spirits and tobacco are in the cure of some other complaints by those who are themselves fond of these poisons.

Yet despite of all this, we read in one of our most popular medical works, immediately after a description of the symptoms of jaundice, the following statement—"For all this, a generous diet, cheerful company, and moderate exercise, especially riding on horseback, go very far towards effecting a cure—perhaps farther than any course of medicine whatever."

We do not, of course, deny that there may be instances where something more should be done than merely to trust the case to nature. Such instances, however, we are confident, must be rare. For one who errs on the side of interfering with the restorative powers of nature too little, hundreds if not thousands fall into the opposite error.

It is not a little surprising to run through our medical books, and observe how often we are advised to trust our diseases to this same elder physician of whom we have been speaking—Madam Nature. Here, for example—and we note it because it this moment meets our eye—are the following remarks concerning chronic dyspnœa, or difficulty of breathing. Nor have we introduced some garbled or distorted paragraph, as might be supposed, but the whole which belongs to the treatment.

"In all these cases, the healing art can do little more than look on. It may perhaps occasionally palliate some of the distress to which the patient is irrevocably doomed; but it cannot go beyond. Perfect tranquillity of body and mind, gentle exercise, a light diet, with a total abstinence from flatulent vegetables and fermented liquors, and an undeviating habit of regular hours, comprise perhaps the whole that can be recommended by the physician or attempted by the patient."

Here again, in the treatment of the very next complaint to which we have opened—the nightmare—we find the following—"The treatment may be stated in few words. The mind and body should be kept free from all undue fatigue and commotion; the diet be light, especially towards the evening; the alvine evacuations should be regular; and perhaps, as Dr. Darwin recommends, a mattrass or harder bed than usual should be used, and an alarm clock be hung up in the room, so that the sleep may be interrupted at short intervals. This will supersede the use of the feeble medicines which were formerly in vogue for the cure of nightmare, such as saffron and peony."

But lest it should be said that after all it is the lighter affections merely, to which our attention is directed, in this case, we will turn, for once, to a very severe affection, viz. renal calculus. After saying that the treatment must be chiefly preventive, and giving the complaint, it is added as the sum—"Whence it appears that the occupation, diet, activity and regimen of a maritime life are the best preservatives against all such affections." In the case of a paroxysm induced by the passage of a stone through the ureters, the warm bath and sundry medicines are indeed recommended; but not in other circumstances.

THE "DELIGHTFUL POISON."

JERUSHEED, the founder of Persepolis, is said by Persian writers to have invented wine. We do not, of course, attempt to vouch for their correctness, but we are willing to present their story. It is by no means unnatural or improbable.

As Jerusheed was immoderately fond of grapes, he undertook to preserve a quantity. They were accordingly placed for this purpose in a large vessel and lodged in a vault. When the vessel was opened sometime afterward, the grapes had fermented, and their juice in this state had a taste so new and strange, that the king believed it must be poisonous. He had some vessels filled with it, however; but "*poison*" was written upon every one of them, and they were placed in his own room.

It happened soon after that one of his favorite ladies was affected with a nervous headache, and the pain distracted her so much that she desired death. Observing a vessel with *poison* written on it, she took it, and swallowed its contents. The wine, for such it truly had become, overpowered the lady, who fell into a sound sleep, and awoke much refreshed. Delighted with the remedy, she repeated the dose (her headache of course returning) so frequently, that the monarch's *poison* was soon exhausted. When he discovered this, he forced the lady to confess what she had done. A quantity of wine was now made, and Jerusheed and all his court drank of the new beverage, which, from the circumstance that led to its discovery, is said to be known in Persia to this very day by the name of "Jeher-e-Kooshon," or "*the delightful poison.*"

WINE AMONG THE JEWS.

It has been stated by Mr. Delavan and others—perhaps on the authority of Mr. Noah—that the Jews have always been in the habit of using unfermented wine at the passover. From their known hatred to all *fermentation*, it is highly probable that they began with the use of sweet wine, but "being mingled with the nations," as the Psalmist says, "they learned their works;" for according to Mr. Berk, a converted Jew from Poland, now in this country, the wine for the passover most certainly undergoes fermentation. His account of the mode of preparing it is as follows:

Upon four pounds of the best raisins, stoned, they pour a gallon of boiling water, to which they add two table spoonfuls of scorched sugar. This is kept in a moderately warm place for three days, after which it is filtered through brown paper, and put up in jars for use. The fermentation is so rapid that it will keep but a few days, consequently the process must be often repeated; especially as this is said to be the common drink of the Jews, when they are able to obtain it, with their meals.

It is obvious from these statements of Mr. Berk, and from the fact, that though a considerable traveller, he has never seen above half a dozen intemperate Jews in his whole life, that this kind of wine must be very weak. Alcohol it must indeed contain, and therefore it is objectionable; but it cannot be much stronger than our common hop beer, containing only about one or one and a quarter per cent of the alcohol.

OFFICES OF THE SKIN.

The human skin is not, as many seem to suppose, a mere envelope of the body—a mere wrapper, as it might be called, for the choicer bundle within it. There is hardly a more important membrane belonging to the system. It is indeed a wrapper, but it is much more. It is an *organ*, having several offices or functions to perform, some of which shall be enumerated.

1. It is the organ of perspiration. From one to half a dozen pints of fluid—nay, in some instances as many quarts, not to say gallons—pass out from the body through the skin in the short space of twenty-four hours. A fluid, too, much of it, which if not thrown out of the body in this way, must either be sent out by way of the kidneys, the bowels or the lungs, to irritate these organs on its way, and perhaps induce permanent disease, or be retained in the blood vessels to irritate or poison the whole system.

2. From what has been already said, another office of the skin will be inferred—that of a depurator or purifier. In this respect it is a co-worker with the lungs, the kidneys, and perhaps the liver.

3. The skin is the seat of touch. For this purpose its third or principal layer is full of extremely minute nerves, the extremities of larger ones which pass out from the brain. They are, in fact, so numerous that we cannot pierce this membrane with the finest needle without hitting some of them.

4. It is, in part, the regulator of our temperature. Man, it is well known, has the power of generating his own heat, so as always to maintain for himself a temperature of about 98 degrees of Fahrenheit, even in the coldest regions, when the air is cooled down to 20 or 30 degrees below zero; besides which he has the power to resist a

temperature as much *higher* than his own body as that is below. Whether in Greenland, in Egypt, or in some huge oven or furnace gradually heated to 200 or 300 degrees, the living mass of flesh, bones and blood which he carries about with him scarcely varies its temperature a degree; and never many degrees. It may at first rise or fall a mere trifle; but it soon settles down at 98 degrees again.

5. Absorption, too, in some small measure, is carried on by the skin, especially when substances come in contact with it which irritate, such as drugs and medicines, accumulated filth, and the like. Let no one be startled at the idea of having the dirt on the surface of his body carried back into the circulation; for if he is too ignorant or too indolent to remove it by ablution, it is a favor to have it removed by absorption.

6. It has been already admitted that the skin is a defence to the delicate vessels and organs which lie under it; though we still say that this is only *one* of its important offices.

7. Lastly, it is, or should be, an ornament. What is there more beautiful than a healthy skin, especially a healthy face? We do not mean a delicate face—so delicate that the least degree of sunshine will spoil it; nor a face with remarkably red cheeks; nor a face surrounded with curls and flowers, or hung with jewels: but a face which has a fine flesh color, such as nature, or rather nature's great Author, intended it should have and maintain.

Such a membrane as this, fulfilling so many important offices or functions, subject, as it is, to numerous diseases, and the source, when neglected or abused, of many diseases in other parts of the system, deserves attention; and we shall endeavor, in our next number, to make our readers acquainted with its curious structure and laws.

HEALTH OF MISSIONARIES.

"One reason why so many missionaries die in this country, is, they come here to die. They come with the expectation of dying. This is their faith, and according to their faith so it is unto them. Now I believe if they had as strong faith that they would live and labor in the vineyard of their heavenly Father, *and would obey the physical laws of their being*, they would surely live."

Such is the language of Rev. Mr. Raymond in a letter written in October last from York, Sierra Leone, Western Africa. We have changed the extract in no respect except to italicise a few words towards the close, that the reader may take notice of one of the conditions with which Mr. R. thinks it necessary for those who would be healthy to comply. Nor does he speak without experience in this matter. Like Crocker and James, whom we have mentioned in the Library of Health, he had for some time prior to his going out to Africa been endeavoring to obey physical law; and like them he believes he is reaping the benefit of it. It is not faith alone that preserves him; he does not say it is. His faith is followed by obedience. While he has lost a child by fever, and his wife has been severely sick, he has passed the ordeal almost unhurt. The fever indeed affected him a few days, but it was exceedingly light.

We believe with Mr. R. in the full power of faith in this matter; not only in the case of the foreign, but also the home missionary. Indeed it is more or less as he says with every body. People expect to be sick, and therefore they are sick. Believing there is a sort of fatality about the matter, and that do what we will, there will be about a certain amount of sickness and premature death in the world, they neither trust God nor obey his law, especially his physical law.

We do not deny the influence of climate, natural constitution, &c. We admit, most freely, that one cause of Mr. Raymond's immunity from disease is, as the papers have stated, his "buoyant temperament;" and that another cause is "no predisposition to disease." But are not his natural vigor and buoyancy greatly increased, almost inevitably, by his faith, as well as by his consciousness of having endeavored to obey, to the utmost, his Maker's will? It is not his natural vigor of body, nor his buoyant temperament, nor his faith, nor his rigidly abstemious diet—of which, too, very much may be justly said—it is not, we mean, any one of these, nor even all of them united, that save him from sickness. It is, we say again, his partial success in his endeavors to obey *all* law—to do, in every thing, what he believes to be right—and in the consciousness of this entire devotion to the will and consecration to the purposes of his heavenly Father.

Mr. Raymond himself may indeed yet sicken and die; but what then? Will it be through any fault of the physical and organic laws, or of their divine Author? By no means. We lay no claim to the spirit of prophecy, yet we do not hesitate to say that if Mr. R. dies prematurely, it will be because of disobedience. The disobedience may not, by possibility, be obvious, even to himself; but it will not therefore be less entitled to the appellation.

How much is it to be desired that every missionary could go forth with the preparation—or with a preparation still better—of Mr. R. They should begin in ealy life to obey, and not wait till they get through or half through college, and have sown the seeds of diseases which may not, for some time, seem to germinate. How much to be wished, in short—since we ought all to be missionaries—that we could all be trained to obey the whole law, natural and revealed, of our righteous Lawgiver and heavenly Father.

PHYSIOLOGICAL VICE.

ONE of the first to designate all sorts of transgression of the laws of the human body by the term *physiological vice*, was Dr. John M. Keagy, late of Philadelphia. This individual, after having been, for some time, an excellent physician and "a burning and shining light" in the Methodist Church, with which he was connected somewhere in the interior of Pennsylvania, left his profession and place of nativity and came to Philadelphia. Here, anxious to prevent rather than correct evil, he became a teacher, in which employment he continued till his health failed him.

We have said that he left his profession; but we say so in mere compliance with general opinion. In our own view of duty he no more left his profession than he did his religion. We believe that he best promoted the interests of both, when he best succeeded in developing the whole nature—physical, moral and intellectual—in due harmony; for then it was that he did most for the extirpation of vice and irreligion from our world. In one word, for we must not enlarge, Dr. Keagy was no common man; and when the hour shall come in which every man's work shall be tried by fire, Dr. K. we may be assured will stand forth as much higher than the mere slave of the ordinary routine of party, sect, caste, or profession, as the celestial is higher than the mere terrestial.

A little before the death of this excellent man, he said as follows—"I despair of seeing a true and rational course of human conduct, in all respects, without the universal diffusion of a knowledge of human anatomy and physiology. I will not even make an exception of that high degree of moral excellence associated with the practice of religious principles; for I know scores of pious persons who, for want of the knowledge referred to, cannot be *the perfect men or women* they desire to be." He also added—"It seems quite absurd and is almost unpardonable, for any man to pretend to be a teacher of metaphysics who is not a profound pathologist and physiologist." Nor is this all, for he said, once more—"We may assert, fearlessly, that three fourths of the vice that entails wretchedness on the human family is, if I may use the expression, *physiological vice;* that is, vice consisting in the depraved indulgence of the *three appetites*, or in the moral feelings brought immediately into malicious action by their means."

This was said nine or ten years ago. Yet it is almost as much as a man's reputation is worth, even now, to utter such sentiments, and to make the just inferences. With the Bible ever in our hands, containing the most awful examples and facts concerning God's displeasure against self-indulgence, from the days of David and Solomon to those of Paul and the Ephesians, we seem yet almost unwilling to consent to the term *physiological vice*, or to admit that abuses of the body—gluttony, drunkenness and licentiousness—have any thing to do with religion. Or if so, it is only such a degree of guilt of this sort as the public sentiment has branded as infamous, which is regarded as displeasing to God. Moderate transgression, by most, is thought a thing of mere brute instinct, which has no moral character. As long as men, women and children do not come under the ban of human law, in their eating, drinking, &c. how much soever they may waste their energies—muscular and nervous—it seems to be thought inappropriate or at least indelicate to talk about being vicious, or above all sinful.

CHAPTER OF INTELLIGENCE.

The Vapor Bath.—Dr. Brigham, late of the Retreat for the Insane, at Hartford, Conn., Profs. Knight and Ives, of the New Haven Medical College, Prof. Johnson of the Wesleyan University, and half a dozen other eminent medical men in the same vicinity, have recommended Hick's Portable Medicated Vapor Bath, as exceedingly useful, not only medicinally, but for ordinary purposes. Dr. Brigham says—"I think very highly of it for use in private families, as it affords an easy and excellent method of giving a warm bath, and will be of great benefit in warding off and mitigating attacks of colds, fevers, &c." Dr. Knight says—"In my opinion it is better adapted for the purposes intended, in point of convenience, economy and efficiency, than any article of the kind which I have seen." By having a bottle of alcohol and a match in one's chamber, a bath can be applied, it is said, in ten or fifteen minutes. To the value of warm water baths, in the form of vapor or in some other way, it is hardly necessary that we should testify.

Fresh Pork and Disease.—A physician was called on Tuesday morning to see a nursing child which had been taken with vomiting the day before. We know not what were the results, except that the child finally recovered. We do know, however, that the family pig had been killed on Saturday; that the killing of a pig was a rare occurrence; that the liver, the pancreas, &c., of the pig were "choice morsels" in that vicinity; that the pig had been fattened in the impure air of a stable cellar; that the liver of the swine, according to the best and most undoubted testimony, when fattened in that way, is usually diseased; and that diseased food, especially pork, when eaten by a nursing mother, always exposes a child, (especially as in the present case, a feeble child,) to more or less of suffering.

Letting alone.—We believe, to the full extent, in the let-alone system, especially in the letting alone of that which is well enough. But we do not believe in letting alone a sick person till he is nearly dead, and then looking to medical men and medicine for miraculous results. Yet what more common?

A kind hearted but uninformed mother asked our advice for a feeble daughter whose health had long been declining, and was told, as other physicians had told her, that medicine could do nothing for her; that her only hope lay in invigorating the system generally; though as an adjunct the warm bath would be useful. Nothing effectual was done—perhaps because no pills, powder or tinctures were recommended. The daughter continuing to decline for five or six weeks, another medical man was consulted, who recommended the vapor bath. Another week had elapsed, Sunday had arrived, and the patient was almost too week to be benefited, when a vapor bath was applied. This is indeed letting alone, but it is letting alone " with a vengeance;" and will probably be the means of letting the patient go down ere long into the grave.

Notes on America.—Dickens, otherwise Boz, in his new work entitled " Notes on America," complains bitterly of the general neglect of ventilation among us, as well as of our neglect of health in some other respects. It were well if we would so far regard the *critiques* of these foreigners, as to profit from them when they tell us the truth.

TEACHER OF HEALTH.

MARCH, 1843.

IMPROVED CITIES.

"THERE are few circumstances," says Dr. Dick, in his Mental Illumination and Moral Improvement of Mankind, "in the state of society, which exhibit the folly and depravity of man in a more striking point of view, than the state of most of the cities and towns of Europe and other parts of the world, not even excepting the British empire. In some of our cities, we have palaces, churches, colleges, and public buildings, of the most magnificent description, while the great mass of the population around are living in miserable habitations, in narrow dirty lanes, which are seldom or never visited by the rays of the sun or the refreshing breeze.

"In the High street of Edinburgh and its environs, which contain a greater number of human habitations than any other spot of the same extent on the surface of the globe, the inhabitants appear to be huddled together like so many rabbits in their cells. The houses are from five to eight and ten stories high, with numerous lanes or closes from four to six feet wide, branching from the street and running down a great extent towards a hollow on each side. In these closes there is neither light nor pure air, but a continual gloom and noisome exhalations; and the physical filth and darkness which abound are generally emblems of the moral pollution and scenes of depravity which are too frequently exhibited in such habitations."

It will be said, we are aware, that all this applies to Europe, and not to America; that we have no such abodes of depravity, moral or physical, as are here described. But if we have no "High streets" which answer this description—and we trust there are none—have we not our "Broad streets," our "Ann streets," and our "Water streets," our "Points" and our "Hooks," where the scenes of depravity which are acted over fall little short of those of the old world. What, too, is still worse, the number of these streets, and the corruption which usually accompanies, is constantly on the increase; and have we not every thing, both as patriots and Christians, to fear?

"Such abodes," continues Dr. D., "are incompatible not only with physical comfort, but with any attempts at improvement in knowledge; and it is a kind of degradation to the nature of man, that any human beings should be doomed to spend their lives in such wretched habitations. It tends not only to debase the moral character, but to prevent the expansion of the human intellect. Instead of an extensive landscape, adorned with flowers and verdure, and a view of the expansive canopy of heaven, the inmates of such dwellings for months and years have nothing presented to the eye but a dead murky wall, bespattered with filth, which confines the range of their vision within the compass of a few feet, and prevents them from becoming acquainted even with the common scenes of nature.

"What has been now stated, will apply, in a greater or less degree, to almost all our cities and large towns, and even to some of our villages. Were we to inquire into the circumstances which led men thus to immure themselves in gloomy holes and corners, like bats and owls, we should doubtless find that the abominable system of warfare has been one of the chief causes of the evil of which we complain. Man, living at enmity with his fellow man, judged it expedient to surround his habitations with a huge wall for protection against his hostile neighbors; and the problem to be solved, in this case, seems to have been, in how small a space can we compress the greatest number of inhabitants, so that our wall and fortifications shall require the least trouble and expense? Small towns and villages which were afterwards built, and which required no fortifications, copied the plan and dimensions of their streets from the fortified towns, and thus the whole of our cities, towns and villages have become bungled and deranged.

"Great cities, especially when ill planned, may be considered as great evils. The Creator evidently intended that the population of the globe should be more equally distributed than it is at present. We are told that 'He created it not in vain, but formed it to be inhabited.' But how monstrous a disproportion is there in the distribution of its population, when we find a mass of human beings, as in London, compressed into a space of little more than 20 square miles, and a similar mass in another part of the same island spread over an extent of 20,000 square miles!"

No wonder that Dr. Gregory, of Edinburgh, exclaimed nearly a century ago—"Cities are the graves of the human species." But, as we shall have occasion to show at some future time, the sparse population is little less ruinous to mind, than the city is to mind and body. City and country are extremes; and in this respect, that is, in regard to their influence on human happiness, extremes seem to meet, or at least to approximate each other. But to continue our extracts.

"There appears to be no reason, except in a very few cases, why any city should extend beyond a population of 100,000 inhabitants; and a city containing such a population should contain five times the area that it does at present. Towns distributed at nearly equal distances over the face of a country, would be far more important to the general improvement of society, than a few crowded cities with an overgrown population; and more conducive to the health and morals of the inhabitants."

Whether these towns should contain more or fewer families, and whether they should be in the form of parallelograms or long squares, on Mr. Owen's plan, or in some other form, is not so material to our present purpose, though it is, in itself considered, and in its proper place, a question of immense importance. But the main idea—that *town*,* and not city or country, is the place for man—should never be lost sight of for a moment. Not only should the eye rest on gardens and farms, but the other senses—the hearing and the smell especially—should come under their influence. They are indispensable; and not less so to females than to males. The first pair were placed amid gardens and fields, and every one of their descendants ought to be. But let us proceed with our quotations.

"There is one circumstance that characterizes almost all our cities, towns and villages, except in some recent instances; and that is the extreme narrowness of the streets, some of which do not exceed fifteen or twenty feet in width. Even in the United States, where the towns have been more recently built, and formed on more expansive plans than in Europe, this evil is found to exist.

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* By *town*, here, we mean something like the central village of our country towns in New England. The towns in Europe are a very different thing.

The street Broadway, in New York, which is so much celebrated, and which is three miles in length, is only 80 feet broad; and most of the other streets are considerably narrower. Most of the streets in Philadelphia are little more than 50 feet broad, except Broad street and Market street, the latter being 100 and the former 113 feet in breadth. Most of the small towns, however, in the northern states, such as New Haven, Northampton, and others, are described by travellers as having broad streets and spacious squares, and as being remarkable for their cleanliness and beauty.

"In Great Britain most of the streets, especially in seaport towns, are wretchedly narrow and dirty. In North Shields, county of Northumberland, the main street is nearly a mile long, but so narrow that, in many places, two carriages cannot pass each other. The New Town of Edinburgh, which contains the most spacious and elegant streets of any city in Europe, is disgraced with two or three long narrow streets, not above one fourth the breadth of the others, intended for the residence of the lower classes; as if they had no right to enjoy a free light, pure air, and a cheerful prospect, as well as their superiors."

Even in our own goodly city of Boston, streets, or lanes rather, are to be found, of considerable length, in which carriages cannot pass each other; though it will not be pretended they are very common. But whenever and wherever they are found, they are a disgrace to a Christian country.

Dr. Dick next proceeded to suggest the following important changes in the condition of towns and villages—though he confesses that he does not expect to live to see the changes which he proposes adopted in his own country.

"1. Most of our crowded towns should be demolished, or at least their streets ought to be widened, at an average of *three times* their present breadth. Extravagant as this proposal may appear, there is nothing that stands in the way of its accomplishment but *selfishness and avarice.* If the promotion of the comfort and happiness of our species were the great object of all our ambition, all difficulties would soon vanish, and all obstructions would speedily be removed; and why call ourselves *Christians,* if this object is not kept in view?

"2. No street in any town or village should be less than eighty feet wide. In large towns, where the houses are above two or three stories in height, the streets should not be less than 100, or 120 feet in breadth."

The former city of Alexandria in Egypt had at least two of its principal streets—one of which must have been four or five miles in length—2000 feet wide. Why should not the principal streets in a Christian city be as wide as those of a Mahometan or Pagan city? Even in our own Boston, we are not aware that there is more than one street which is 100 feet wide.—But to the suggestions of Dr. Dick.

"3. Narrow lanes and closes, of all descriptions, ought to be forever banished from all our towns and cities.

"4. The practice of *sinking stories* below the level of a street, unless for cellars, should be laid aside. It has become an almost universal practice in Edinburgh and other towns, especially in genteel houses, to have a *sunk* story for the kitchen and servants' room, as if they were not worthy of enjoying pure light and pure air, and their health in no danger from the dampness of such apartments. There is something absurd and preposterous in being at the expense of digging a hole for the under story of a house, when a kitchen and laundry could be built behind the house on a level with the street, which would be more convenient and salubrious."

We verily thought our author, in a moment of satire, was going to speak of the absurdity of being at the expense of digging a hole under the story of a house for burying people alive. The custom of having cellars is objectionable, but still more that of living in them. Yet the practice, notwithstanding its absurdity, is rapidly increasing in our own country; but is always fraught with much evil to the public health. But again:

"5. Houses might be built with *flat roofs*, with a parapet surrounding them, breast high, which would form a promenade for families in towns, where they would enjoy an airing and a prospect of surrounding objects, without removing from their dwellings. It would also serve for drying clothes, contemplating the heavens, and various other purposes. In Eastern countries, where the houses are constructed with flat roofs, they form the sleeping places of the family during the summer months. The rain that falls upon them might be so conducted as to supply every family with water for washing and cooking victuals.

"6. Squares, crescents, or octagonal spaces should be appropriated, in different parts of a town, for bazars, or shops where all kinds of merchandize should be sold; each shop having an apartment or two connected with it for the temporary accommodation of a family.

"7. The streets more particularly appropriated for dwelling houses, should have verandahs or garden plots in front of the houses, on each side, diversified with shrubs, flowers and evergreens, and at certain regular distances, a few forest trees, so that the streets, although eighty feet broad, would require only about forty feet of pavement."

Who can avoid contrasting this picture of what a city *should be*, not only with respect to health but beauty, with the deformity that *now is!* Instead of having broad streets appropriated to dwelling houses, with garden plots attached to them, the larger proportion of our city people are the occupants of houses which, without any garden in front or rear, either form close blocks, on narrow streets, or whose basements or first stories are used for dry goods, groceries, or other merchandize, or apothecaries' shops, public offices, &c. Even the churches of the living God, beautiful as their spires may appear, and heavenward as they are directed, too often have shops of various kinds—not to say rum shops—under them; and seldom or never have any such things around them as squares, trees, shrubs, or flowers. Again:

"8. In every large city, open spaces within the city should be set apart for pleasure walks for the citizens, and diversified with trees, evergreen shrubs, seats and bowers for shelter from the heat or rain. In small towns, such rural walks should be formed to go quite round them.

"9. A square plot of meadow ground at each end of a town might be set apart for amusements or exhibitions, which might also serve for grazing, bleaching, promenading, and other purposes.

"10. Certain streets might be allotted for houses of one or two stories, for the accommodation of those who have it not in their power to occupy more stately mansions, so as to preserve uniformity in every street; but such streets should be equally broad, adorned in the same manner as the other streets."

This may do under a monarchical government; and in truth might do *very well;* but such distinctions ought not to be found in the case of citizens of the United States, if they can possibly be avoided.

"11. Between the different streets should be garden plots for every family, and accommodations for washing and bleaching, as also for erecting workshops for smiths, carpenters, weavers, &c., wherever they are required.

"12. Encouragement should be given, in the neighborhood of large towns, and throughout the country at large, for building towns on such plans, and for transforming our present hamlets and villages into more convenient and pleasant places of residence."

Dr. Dick's concluding remarks or inferences shall form our own conclusion to the present somewhat extended article.

"If mankind were united by the bonds of Christian affection, and if all were as anxious to promote the happiness of their fellow men as the greater part are to hoard up wealth and riches which they can never enjoy, all the improvements now suggested could be easily accomplished within the course of a few years, or at farthest within the limits of the next generation. But so long as avarice sways its sceptre over the human breast," (and here alas! is the great obstacle of obstacles to human happiness,) "no extensive improvement, either in knowledge, religion, or physical comfort, can be effected."

PREVENTION.

The following is the sequel of our remarks, under a similar head, in the last number.

THE waste of time, talent and property—to say nothing of the moral declension to which the various infractions of the laws of health and life expose our race—is all but incalculable. The mere amount of property expended for physicians and medicine is surprising. Allow but one physician to 1000 inhabitants, and his family expenses to be but $365 a year—all of which, as a general fact, is paid by his patients—and yet the expenditure, in the United States alone, for a single generation to come, would probably exceed $365,000,000. Yet this is but a part of the whole expense for sickness and physicians. If the cost of the medicines taken, (of which about ten times as much is taken ignorantly as at the prescription of physicians,) which is probably as much more, were added, and afterward the value of the time—believed to be at least the value of a year's labor, upon the average, or $100—the amount of which would be $2,500,000,000 for our whole population, the sum total would be $3,200,000,000, or $80,000,000 a year, or an average tax of above $3 a year to each inhabitant. Nor is this estimate by any means an exaggerated one.

Now there is little doubt that a strict obedience to the laws of health would prevent the necessity of at least two thirds, if not three fourths of this expense. But let it be placed at two thirds. Physical obedience then would save the nation more than $53,000,000 a single year, or $2,100,000,000 in forty years. Or it would save us what is equivalent to a yearly tax of $2 on each member of our families.

Who then is he that will continue to ask for proof of the truth of the vulgar saying, that an ounce of prevention is worth a pound of cure?—Do we still ask what it will profit us to obey the laws of exercise, breathe pure air, eat, drink and sleep properly and moderately—in short, obey all the natural laws of the divine Lawgiver? For such as do this, would any amount of proof or facts whatever be sufficient?

In nearly all we have said thus far in regard to health, we have kept out of view the *suffering and vice* which physical disobedience brings in its train. We are far, however, from denying the general truth, that disobedience—not indeed the *first act*, as Milton has it, but the sum total of wrong acts—brought death into the world, and all our wo; on the contrary, we receive it. Not a few, however, are more readily, if not more effectually, moved by the exhibition of losses which may be reckoned in dollars and cents, than any other, and hence we have made a principal use of this sort of evidence.

How unaccountable it is, that while so large a portion of the community, especially the Christian portion of it, admit in word that suffering of all kinds—disease not excepted—is the consequence of disobedience *in general*, so few will attend to the subject long enough to ascertain what the particular *acts* of disobedience are from which they and others suffer. After much concession in *generals*, is there not every where a practical skepticism in regard to *particulars?* Do people really believe that their diseases are the consequences of transgression—that of themselves or those around them? Is there not a confused belief, every where, that diseases are scattered among us *arbitrarily*, or at least without reference to *law* or *penalty*, and that no efforts in the way of prevention are likely to be of any considerable service? Were it not so, why is it that those of us who labor in this department—whether to write, or lecture, or give private advice—must labor almost in vain? Were it not so, why should we be compelled to write books and periodicals which every body approves, but which few—that is comparatively—will read; and to lecture, if we lecture at all, to almost naked benches?—Does any one really, and truly, and *practically* believe that we are living and laboring for the good of him and his children, and not less than others are for the good of our country and the world?

Most people believe that they suffer more evils under a government constituted by one set of men than another. This, too, is a *practical* belief; and hence it is pretty easy to induce them to read and hear—yes, and to *act* on the subject. Let but a popular partisan speak on politics, to complain of existing evils, and point to a supposed remedy, and he can have benches filled, and the most earnest attention. Let a newspaper or a book discuss these subjects, and people will read as if for their lives. More than even this; not a few will give their money as well as spend their time very freely, to effect a change in some petty office with a view to remove what is confessed to be a minor evil, who will not lift a finger or expend a cent to prevent disease, and the attendant expense and suffering.

Suppose a national tax of two dollars upon every citizen were constantly paid, think you that the existing administration would be suffered to remain in peace and quiet? Yet has it not been shown that we actually pay such a tax, when we might as well be making efforts to prevent such a necessity, as attempting to change the administration of our government, without the certainty, after all, of removing the supposed abuses? Is it not true that, as in some other things, so in this last,

> "We change the place, but keep the pain"?

And have we not been doing so generally, these forty or fifty years? Yet we toil on—rather, quarrel on—and waste our precious years and lives in political or party struggles, while a host of evils are suffered to remain, which might be removed, during the existence of which, so long as they remain, it is of little consequence, comparatively, whether the administration be whig or democratic, or whether this man or that presides. As are the people, so will be the ruler, generally speaking, at least in a government like ours. If the people are ignorant and sickly all this while, and are to remain so through coming generations, of what use are our efforts to change our rulers? Or rather, why not apply ourselves to the work of changing, by enlightening and improving the people, who are the *true rulers?* Have all our party efforts, from the days of the elder Adams to the present hour, done as much to enlighten our citizens or make them healthier or happier, as might a single improved school house or school book, or a single book or lecture on health ?

It is marvellous that men of sense—such as the good people of our own Massachusetts—cannot see this matter in its true light. Or seeing it, that they will not change their course. Prevention is worth not merely ten times but a thousand times as much as cure, in every thing—in politics no less than elsewhere. Yet leader and the led, "priest and people," at least politically so, alike wear out their valuable lives, and go down to the grave in doctoring society, for political and other evils, to little or no purpose, when half the efforts they make to sustain whiggism and democracy would often save them hundreds of dollars each, and much pain and suffering, and place their posterity on much higher ground in this respect than they themselves occupy. Is it not so ?

Let the true friend of his country, then, go to work at removing ignorance and vice ; first in himself—next in those near him and dependent on him—and finally, on those more distant. No matter, that is comparatively, we say again, who governs in state or nation, or what are the measures, till he and his family, and society around him, are made wiser and better and healthier. For the latter objects, let time be spent freely, and money be poured out, if necessary, like water. Such efforts the God of Heaven will bless ; and by such instrumentalities, and by such alone, may our government and all our dearest interests be promoted and perpetuated.

HEALTH OF STUDENTS.

LETTERS TO A FATHER.—NO. III.

I AM not quite sure it will be best to attempt to change the taste of your son, since matters have gone so far. And yet I should certainly make the attempt, if he were mine. I do not mean to say I would discourage him from learning; for farmers and mechanics can learn as well as other people. But I would do my utmost to dissuade him from the usual or fashionable course of study.

Nor have I much doubt of the ability of ingenious parents to give such a taste as they please to their children. Even as late as it is in your case, I would attempt it.

Since I wrote you last, I have reflected a great deal on the soundness of my views on this subject, and am more and more sure that I am right. Let me repeat some of them in brief.

I believe that, as a general rule, a boy who manifests a strong propensity for study, should be made a laborer, if possible; but at any rate, should be put to labor for a few years. And the greater his aptitude to learn and his devotion to books, the greater, in the same proportion, the necessity of *using his muscles in the open air*.

I believe that if this course is not taken, the life of the individual, though it may be "*short and merry*," or "*brilliant*," will yet early expire. It will as surely be so as that a steam boiler will burst the sooner for straining it to the performance of quick voyages. And he who thinks all is safe, because a boiler has not yet burst, is just about as wise as he who thinks that a book lover is safe because he goes on bravely thus far.

I believe that all our intellectual, social and physical tastes and preferences are as surely *fallen* as our moral ones. I do not believe a part fell, and not the whole.

Even instinct is perverted, though perhaps not so much. A child's preference of an employment is no more likely to be *God's preference for him*, than his preference for sugar candy.

But again; I suppose we can as surely bring ourselves, at any age, to like what we believe to be best for us in morals, food, drink, employment, books, companions, &c., as Addison said we could to like what manners and customs were best for us. "Fix upon what is best for you," said he, "and custom will soon make it agreeable."—Changing the word *soon* for *in time*, and the remark will be applicable every where. In the case of your son, he must of course be convinced that the given thing *is best* for him, before he can succeed.

I do not despise genius; by no means. I observe, however, that men are not born with an attachment to an occupation in a country where that occupation is unknown. Men are not born flax-dressers in China, nor tea-men in Ireland. Born however as they may be, their first or native tendencies are no more likely to be right, than the first tendencies of a child to be combative or vain are likely to be right.—The world have certainly inverted the natural order of things. Facts prove it so, were phrenology and physiology both silent.

VINEGAR INJURIOUS.

Many a writer on health, who has seen, most clearly, the evil tendency of all things which are unduly exciting or heating to the blood, or to the system generally, (and among the rest the various condiments which are used in civilized cookery,) has yet manifested a strong desire to retain vinegar. All are hurtful, they will tell us, except vinegar and salt. Some indeed reject all but salt; generally, however, we still say, vinegar is retained.

But on what ground? We wish to know the strong reasons why a company of supposed offenders should be cast out from among us, and yet one or more of the gang remain. Vinegar, we know, is less heating than some of the fraternity, but sugar of lead and many other deadly poisons are far from being regarded as heating. Vinegar is certainly irritating, to say the least about it; as much so as ginger, or cinnamon, or perhaps even pearlash.

Let us consider what vinegar is; we mean in its intimate nature or chemical composition.

"When liquids, such as beer, cider and the weak bodied wines, are exposed to the air and to a temperature above 65 degrees, a series of actions ensues, which terminates in the production of vinegar."* It is to be observed, however, that vinegar may be produced from a few substances which have not, like the above mentioned liquids, gone through the vinous fermentation. Vinegar may be made from wood, and may even be generated in the diseased human stomach. Generally speaking, however, vinegar is the result of a chemical change in some substance containing alcohol; which change appears to consist in the conversion of alcohol into an acid; or the substitution of one poison for another.

Here, however, we anticipate a little, for it does not follow that because a substance from which another is made, chemically, is poisonous, that therefore the latter is poisonous too. Some of the strongest poisons, decomposed, are perfectly harmless. Alcohol, though undeniably a poison, is yet made from one of the most innoxious substances in nature; and it is certainly not unreasonable to conjecture, had we no evidence in the case, that it might be changed into other substances as bland as saccharine matter or sugar. In the present case, however, it is proved to be otherwise. Vinegar, that is, the acid of vinegar—the acetic acid—is a poison as well as alcohol.

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* Gorham's Chemistry, vol. ii. p. 390.

Is proof required ? "Acetic acid," says Gorham in his Chemistry, "is a transparent and colorless liquid, of a very sour and sharp taste, and of a pungent odor. It is so caustic as to excoriate (eat, as it were) the skin. It is inflammable, and takes fire on the application of a flame." Parkes says, in his Chemical Catechism, that it is very "pungent, acrid and volatile, and corrodes animal substances." Is a substance which thus corrodes or eats the skin or flesh, any thing less than a poison ?

Orfila, a distinguished French physician and chemist, in a work on poisons, has set down the acetic acid in his list of what he called *concentrated acids*, of whose effects on the human constitution he gives the following account:

"Immediately after having swallowed a concentrated acid, the following effects are experienced :—A very disagreeable acid, burning taste; heat in the throat and stomach; acute pain in the throat, which soon descends to the bowels; insupportable fetor of the breath; frequent risings; inclination to vomit; abundant vomiting of different colored matter, sometimes mixed with blood, which reddens tincture of turnsol like acids, and produces a sensation of bitterness in the mouth; hiccough; constipation, but more frequently copious and more or less bloody stools; colic, or rather such an acute pain in the belly, that the weight of even the mere linen is insupportable to the patient; these pains sometimes extend to the chest; difficulty of respiration, anguish, pulse frequent and irregular; burning thirst; drinks augment the pain, and are soon vomited; chills from time to time; the skin, and particularly the inferior extremities, are almost as cold as ice; cold and clammy sweats; repeated and fruitless efforts to void urine; continual change of position; convulsive movements of the face, lips and muscles; considerable depression of spirits; physiognomy little altered at first, but soon the hue becomes pale or leaden; the intellectual faculties preserve most frequently their powers. It is not rare to see the interior of the mouth and lips burned, thickened and filled with white or black slough, which in separating irritate the patient, and induce a fatiguing cough; the voice is then altered; there is sometimes a painful eruption on the skin.—Nitric acid, or aquafortis, produces also yellow spots upon the lips and those parts of the skin which it touches."

Vinegar, it is true, is this poisonous acid diluted. It also contains some of the other vegetable acids, such as the malic and the tartaric; together with gluten, mucilage, and a little coloring matter. This, we say, is its constitution, whether made of wine, cider, beer, sugar or wood; for science has found out that vinegar may even be made from wood. But let it be made from what substance it may, and be ever so much or so little diluted, it is vinegar still, and its basis is still the poisonous acetic acid.

Now can such a poison be fit for the human stomach? No matter how small the quantity, for though the strongest poisons may be diluted, yet they are poisons still. Is it possible for the tender lining membrane of this organ to be subjected to its corroding, caustic influences, without receiving more or less injury? Who that has ever seen vinegar applied for a considerable time to the skin, and witnessed its effects, will believe, for one moment, that they will be *less* striking, in the case of its application to a membrane much more susceptible?

Aside from all this, however, there is a strong suspicion resting on this liquid. We have seen that, generally speaking, it is the effect of decomposition. It is the result of *one more step* in the path to putrefaction. The vinous change is a step that way; but the acetous change is a step farther. One step more brings us to the end of the course, even to putrefaction. Vinegar is, in truth, therefore, a half corrupted substance; and is wending its way, as fast as possible, to the great ocean of corruption itself.

Another suspicion still. Vinegar, in medical language, is a sedative; that is, it lowers the arterial action, and weakens, for the time at least, the vital energies. Many an individual who was too corpulent, or who fancied herself so, has taken vinegar to produce a more slender form, and found it effectual. Can that which lowers action, diminishes nervous energy, and wastes the flesh, be wholesome?

But the *small quantity* of the poison, or corrosive principle, will still be talked about, especially by those who have been trained to its use. So for a long time was the small quantity of alcohol in beer, cider and wine; and for similar reasons. But science has taught us differently—saying nothing of the truth or untruth of homœopathy. Let us learn to yield to truth in practice, as well as in theory. Let us learn to receive that which science, the handmaid of truth and nature, tells us is proper, and reject what she assures us is injurions. Let us learn to obey God rather than man, or those perverse appetites and habits which the folly of man has induced.

STRUCTURE AND LAWS OF THE SKIN.

We cannot but hope that the article, in our last number, on the offices and functions of the skin, was the means of awaking some reader, here or there, to the conviction that this membrane, having an extent, in the adult, of some fifteen or sixteen superficial feet, is a membrane of interest and importance. If so, he may be prepared to learn something of its structure.

The skin is a triple membrane, and not, as might be supposed, a single one. The external layer is a mere *scarf*, of the nature of horn, hair and nails, with little sensibility ; easily destroyed, and almost as easily and rapidly restored. How often do we graze the surface of our bodies or limbs ; how often blister some portion of our surface ; yet how soon is the denuded surface covered with another, though at first more tender cuticle.

Simple, however, as the cuticle is, in its nature, we hear wonders about its structure. Some say that when viewed with the aid of a telescope of great power, it appears scaly like a fish skin. Others say it has thousands and thousands of pores or openings, (for the matter of perspiration to escape,) to every square inch. One thing is true, at all events, that the matter of perspiration passes through it in countless streams. It is also true that a thin oil, formed in little bottle-shaped glands underneath the cuticle, called *sebaceous glands*, passes through it, and is spread on it, to keep it pliable, as well as for other purposes.

But immediately under this is another layer, equally thin, and much more soft and delicate, called the *mucous coat*. This it is which gives color to the skin, being almost white in the European, but black in the African. Indeed, strip off this gauze-like membrane, and the third layer on which it rests is of the same color the world over; and so is the cuticle above it. Leather made from the human skin would be of the same color in Africa, Asia, Europe and America. So true is it that God has, literally, made of one blood—and essentially of one color—all the nations of the earth.

The real or true skin—the third layer—is, after all, of much the most importance. It is this that contains the blood vessels and nerves; indeed it is full of both. It is quite thick; though thicker on the outside or backside of the body and limbs than elsewhere. It is thicker or thinner (in some measure) according to our varied temperaments; though, as a general rule, the thicker and more vigorous it is, in the individual, the firmer his constitution.

The skin formed of these three layers is connected with the parts beneath it, on which it lies, by what is called cellular membrane. The connection, however, is rather loose; and the skin, in many places, is quite movable. Immediately under the skin are many large veins, which in thin people appear to be a part of it. The hair also appears to rise in the cellular membrane, and to pass through the skin; but whether the skin adds to it, or merely suffers it to pass, is not known.

The thousands of blood vessels, nerves, glands, &c., in the skin, were all made for action—and hence the skin should have proper action or exercise. If denied that action, we sicken. On the contrary, however, if it over-acts, as it sometimes does under the influence of great heat, we also sicken. Of the nature of the disease thus induced we shall have to speak at another time. Meanwhile we commend to every reader to study Dunglison or some other accredited physiologist on the points already named, that he may at least be familiar with our *terms.*

EVILS OF HEAVY SHOES.

Thick shoes, no doubt, have their advantages, trained as we now are. Thus there are multitudes of persons who, confined to the house by their employments or by fashion, have not the necessary degree of hardihood to enable them at once to withstand the ill effects of wearing thin shoes, when they go out for an occasional walk or ride. These persons, if they continue to follow a course of life which is so unnatural, should provide themselves with thick shoes; though even these, if worn too frequently or too long at once, will produce more remote evil than present good.

In order, however, to perfect health, the foot, as a general rule, should be free and unrestrained in its motions. "In a graceful human step," says Chitty in his Medical Jurisprudence, "the heel is always raised before the foot is lifted from the ground, and the weight of the body, supported by the muscles of the calf of the leg, rests for the time on the forepart of the foot and toes. There is at that time a bending of the foot in a certain degree; but where strong wooden shoes have been used, or any shoe so stiff that it will not yield and allow this bending of the foot, the heel is not raised at all until the whole foot rises with it, so that the muscles of the calf are scarcely used, and in consequence soon dwindle in size, and almost disappear."

The less, therefore, the natural motion of the foot is interfered with, at every age and in every condition of life, the better; provided, however, that in all circumstances and conditions we possess that measure of bodily vigor for which our Creator designed us. Shoes and boots, by impeding motion, not only prevent healthy action of the muscles, ligaments, &c., but also the free circulation of the blood, and the proper and free distribution of the nervous energy. The consequences are, first, the weakness and dwindling of the muscles of which Mr. C. speaks; secondly, want of ease and freedom in walking; thirdly, coldness in the feet and lower limbs; fourthly, a tendency of the blood to the head, with its attendant train of evils; fifthly, a tendency to varicose veins and other diseases.

But may not shoes still be worn, provided they are made light and to fit the foot? it will be asked. Most certainly they may; and in the present state of things should be. Though even here, in avoiding the extreme of wearing a thick straight shoe, which has the effect of a thick board applied to the sole of the foot, some have gone to the other extreme of having a shoe fit so exactly to the foot, that the latter is as effectually restrained in motion as if it were boarded.

One boot-maker in this city has the just reputation of making boots which fit the foot as exactly as the covering of a mummy is fitted to its contents. But then it is also true that the foot thus wrapped up, has little more of motion than the mummy has. If the sole of the boot is not too thick, the arch of the foot may yield a little; but if otherwise, the results, physiologically, are little more favorable than in the case of the wooden shoe; indeed in some respects not so favorable. For though these boots which fit so well do not absolutely compress any part of the foot, yet as they touch every where on the surface of the foot, there is by no means that free action of the muscles, nor that entire freedom of circulation which a loose shoe with a stiff sole admits.

The truth is—and we repeat it that it may be well understood—all constraint of the foot, while we are in active exercise, is, in the abstract, an evil. It is a source of clumsiness, deformity, feebleness, coldness and disease.

True it is that the feet should be warm, or rather, should not suffer long from cold; but then it is also true that no child who goes barefoot suffers with cold feet so long as he keeps stirring.

But would you then recommend to people to go barefoot, in all circumstances? No such thing. So long as the modern customs of civilization go on, shoes must be worn, more or less; and perhaps it may be true that in any state of society it must be so. But what then do you mean? it will be asked, still. We will endeavor to be explicit.

The general rule, at present, is, to wear sandals, shoes or boots; to go barefooted, the exception. Whereas it should be distinctly understood, that whenever any thing is worn on the feet, it is only as a choice of evils; and therefore the general rule should be to go barefooted, and to wear any thing on the feet should be the exception.

That exceptions to the general rule here laid down may be pretty numerous, we do not deny. Some of them will be mentioned.

1. The new born infant. As the child newly born is *passive*—having little exercise, and a comparatively feeble internal action—some covering for the feet will always be necessary. When the clothes, of themselves, answer this purpose, it will not, of course, be necessary to add shoes or stockings; but a covering of some kind will certainly be proper.

2. Some persons lie with their arms and heads out of bed during the night; but the feet of all should be covered during sleep.

3. When we sit, the feet should be covered. Among many Asiatic nations, it is customary to wear sandals when they go abroad, and pull them off when they enter a house. This is inverting the natural order of things. The feet might indeed be washed on entering a house,

as the eastern custom is; but slippers or some other covering should be immediately applied, unless, indeed, in very warm weather, when there will be a sufficient degree of warmth without it.

4. Very tall and slender persons may sometimes require shoes when others would be able to dispense with them. The reason of this is that their extra height is usually accompanied with a predisposition to disease of some sort, and with a feeble power of generating heat in the system.

5. Those already afflicted with chronic disease generally need shoes or sandals, and often stockings. Stockings, however, for healthy adults, are quite an innovation upon ancient customs, not having been known in the world till a very few centuries ago. The question of their general use is to be settled on other considerations than those which apply to shoes.

6. Very aged people, whose circulation has become languid—who have advanced to their second childhood—require more or less covering for their feet.

7. Females in some of the circumstances of their lives, more than males, need the means of extra warmth to their feet and lower limbs.

8. We need shoes, when our employments would otherwise subject our feet to mechanical injury. Farmers, for example, in harvesting their grain; geologists, mineralogists and surveyors, in travelling woods, swamps and precipices; miners in excavating rocks, &c., must protect their feet by shoes or boots, or they cannot advantageously pursue their employments.

But it should never be forgotten that the great source of heat to all parts of the system—the feet no less than other parts—is the power of those parts to generate heat for themselves. Shoes, unless indispensably necessary, weaken the calorific power, and should, therefore, whenever it is possible, be avoided.

POISON IN MODERATE QUANTITY.

Leicester, 12th mo. 21st, 1842.

Dr. Alcott :—Your article on lead water in Lowell induces me to trouble you with some of my experience on that subject.

About the years 1824, '25 and '26, while enjoying apparent good health, I was suddenly and violently attacked at three different times with a disease which *I think* my physician called bilious cholic, each of the last two attacks being more violent than the former one; and the third one left me suffering under an inflammation of the bowels which kept me confined two weeks. On one of these occasions I lost seven pounds of flesh in eight days from the commencement of the attack.

As I never believed that sickness would attack people without *a specific cause*, I endeavored to ascertain the cause of these attacks, and after the last one, I recollected that on each of these occasions I had drank a glass of strong beer at a tavern bar a short time before the attack; and twice, certainly, the beer was taken upon an empty stomach.

This beer was drawn by a pump through a pipe from a barrel in the cellar ; and as these were nearly if not quite the only occasions on which I drank beer, I had no hesitation in coming to the conclusion that the disease was *colica pictonum*, and was occasioned by lead taken up by the beer.

I had no other attack of this complaint until the summer of 1836. In August of that year I called at a house at 6 o'clock, P. M. and requested a drink of water. The woman took a glass, went to the pump at the sink, and remarked that as no water had been drawn since noon, the water in the pump would be warm ; but after drawing a little, it would be cool. I answered, as I took the glass, that I preferred it warm, and held the glass and caught the first water that run, and drank it. The next morning I was attacked with severe griping pains, which I instantly recognized as old acquaintances; but, as I had suffered exceedingly with rheumatism for some months previous, I supposed it to be an attack of that disorder in a new place. After a few hours the pain grew violent and constant, and during that day and the next I was not able to sit up more than ten minutes. Sometime in the afternoon of the second day I thought of that pump, and the whole mystery was solved. About a month afterwards I called again at the same place, and found by inquiry that the water was brought some distance in a lead pipe.

Thus it seems that a single glass of water from a pump in constant use, was sufficient to induce a violent and rather dangerous attack of painter's cholic. With this fact staring people in the face, who can feel safe in the use of water drawn through lead pipes, or from wells into which they enter?

Yours, &c.,

William B. Earle.

BREAD AND MILK.

Many startle at the assertion that bread and milk is sometimes a bad article of diet. Now we never said that either bread or milk was hurtful in its own place, and in moderate quantity; but when used out of place, as they often are, bread and milk may slowly destroy, as well as any thing else, which is not absolutely poisonous.—We will dwell a little on this subject.

1. Most persons use bread and milk in too large quantities. All fluids are, to the adult at least, difficult of di-

gestion; indeed in strict truth the stomach cannot digest them. Milk is only digested by being changed in the stomach into a *soft solid*, or in other words, curdled. Milk is the food of babes; but more solid food should be used by adults. If the latter use milk, the general rule for them should be to use it in very moderate quantity. A pint a day, for a person in healthy middle life, is a large quantity.

2. Bread and milk, as commonly eaten, do not give enough of employment to the teeth and salivary glands. First, the bread is usually softened by the milk, so that it seems to require but little of mastication or insalivation. Secondly, the milk aids in washing down the bread prematurely. It would be well to eat our bread without breaking it into the milk; and afterward to eat our milk as slowly as if there were bread in it.

3. Bread and milk are eaten at a wrong hour. We speak, of course, as we have all along done, of adults, and not children. The latter, when very young, may eat milk at any hour of the day in which it is proper for them to eat any thing. But adults, if they use milk at all, should use it either at breakfast or dinner; never at supper. Yet, if we are not very much mistaken, the general practical rule among us is to use it at evening.

If it is asked why we may not as well take milk at evening as at any other time, our reply is, first, that liquid food, even milk, is too difficult of digestion to be eaten in the evening; even if we were then vigorous. But secondly, no stomach is as vigorous at evening as at other times. The labors of the day, whether mental or bodily, have exhausted, in a considerable degree, the nervous energies.

Students often think—and others think so, too—that bread and milk is a very fine thing for them; and seem almost surprised to find themselves becoming dyspeptic under the use of it. But no student ought to eat a full bowl of bread and milk for supper; no student, we mean, who really *studies*. His brain has been worked too hard to have any energies left wherewith to work on bread and milk. Better eat the bread, without any thing else with it; indeed, a supper of dry bread is best for every body as fast as they can bring themselves to the use of it.

4. Lastly, bread and milk are usually eaten quite too rapidly; and not a few prefer them on this very account. They love to have a meal which they can swallow in five minutes, or at most eight. But this is a strong reason why they ought not to use it. Far better would it be for a person to devise ways and means for compelling himself to eat more slowly, and let his teeth and salivary glands perform the work which their divine Author has assigned to them.

The custom of eating a bowl of bread and milk, after we have eaten a full supply of something else, is worse than almost any other. Yet this custom is quite common with laboring people, in the country, at evening. No wonder the world contains so many dull intellects.

In the remarks which we have made, we beg to be understood. We have not said that there are not many worse things than bread and milk, even as it is now eaten; nor that our people would not be gainers—as a whole people—by substituting a bread and milk diet at every meal for the diet now in general use; for we have no doubt they would. Still it is not in the abstract the *best food* for adults which can be eaten; and the fact ought to be extensively known.

OBEDIENCE TO NATURAL LAW.

The necessity of an inclination of the different sexes towards each other, says Dr. Dunglison, to the general preservation of animals, is manifest. It is to the preservation of the species, what the sensation of hunger is to that of the individual. It is certainly primary and fundamental, for it is independent of all external influences. It does not make its appearance until puberty, and it disappears long before other faculties.

We wish, most heartily, that the object and bearing of this great natural law were duly considered. The indication, it is said, does not make its appearance until puberty. Such, Dr. D. no doubt intended to say, is the law of the Creator; but that law is most wickedly broken. The state of feeling—and even the corresponding expressions and acts—which belongs to eighteen or twenty years of age in one sex, and sixteen or eighteen in the other, is developed, for the most part, many years earlier; and society in general, to say nothing of the parties concerned, is forced to pay the penalty.

The causes of this precocity are exceedingly numerous, and some of them seem to be identified with the state of civilization itself. We must return to a simple and natural—not indeed a savage or barbarous or semi-barbarous—state, and obey all law, especially that which obtains within the vital domain. Nothing short of this will answer the purpose. As things are, we not only reach maturity too soon, but we perpetuate ourselves too early, enjoy but a short and imperfect manhood, sink into premature old age, and are succeeded by a new generation more feeble than ourselves, to follow in our footsteps, and accelerate more rapidly the downward progress of our race.

CHAPTER OF INTELLIGENCE.

Wonders within.—Those who are prone to seize at every thing which has the aspect of novelty, might do well to look within, and observe the movements of that machinery which called forth the exclamation of the Psalmist—we are "fearfully and wonderfully made."

The heart, according to the best calculations we have been able to make, propels into the aorta twenty hogsheads of blood in twenty-four hours. This blood, at first setting out, travels what would be equivalent to about half a mile an hour, or eleven miles in twenty-four hours. The heart of an adult beats 60 times a minute, and 86,400 times a day; or in a whole life, if protracted to 80 years, no less than 2,438,604,800 times. Even this computation, however, is not large enough; for the infant heart beats about twice as often as that of the adult, which would probably raise the number to more than three thousand millions.

We breathe, in adult life, about 18 times a minute, or in a life of 80 years, 731,914,773 times, making no allowance for the more rapid breathing of infancy and childhood, which would raise it to a thousand millions.

A person whose movements should average 10 miles a day, every day through a life of 80 years—and this is not more than ought to be made—would move one or another of his limbs 1,541,760,000 times. Multiply this by 100, the number of muscles, bones, &c., concerned in each motion, and you have a product of 154,176,000,000.

Domestic Poisons.—The following article has lately been in many of the papers, and is probably correct:

"Few are aware of the poisonous qualities of German silver. It is very good for gun mounting, rifles, and various other uses, but never should be used in the form of spoons, or vessels for cooking. It is composed of copper, arsenic and nickel. It oxydizes very rapidly, in contact with any acid, even slight vegetable ones; and the small particles which are taken into the stomach imperceptibly, act as a slow and sure poison. Pure copper spoons would be preferable. Every one is acquainted with the nature of arsenic; nickel is equally poisonous."

Health Papers.—The only paper solely devoted to the work of promoting health and longevity, except our own—the Health Journal—has yielded to the human law of mutability; and we are left alone. In other words, the Health Journal is merged in the "Independent Magazine;" the first number of which came out in February. It appears in an elegant dress; but like many persons and things beautifully dressed, contains a mixture of the perfect and the imperfect within. The "Reorganization of Society," seems to be its leading object—probably on the principles either of Fourier or the elder Owen.

Our main objection to these new modes of reform is, that it is hardly worth while to multiply associations. God has, from the first, established two, the *family* and the *church;* or the smaller and the larger *community.* These, we know, have not "gone on to perfection"—nay, they have even been abused—but we do not expect to see any thing in vogue better calculated in its fundamental principles to regenerate mankind; or any thing which, properly managed, tends less to selfishness. Let all our energies be concentrated on the *two churches*, the *lesser* and the *greater*, and the day which Fourier and others so much desire—the glad day of our redemption—is at hand. The so much distrusted, so much sneered at institutions of Jehovah will then be found fully adequate to accomplish their purposes.

TEACHER OF HEALTH.

APRIL, 1843.

TEACHING PHYSIOLOGY TO THE YOUNG.

That distinguished scholar and Christian, Thomas Dick, LL.D., of Scotland, in one of his volumes, has the following interesting remarks on the importance of a knowledge of the laws of Physiology to the Young:

"The evils arising from ignorance of the corporeal functions, and of the circumstances by which they are impaired, are numerous and much to be deplored. From ignorance of the structure and functions of the *digestive organs*, parents frequently allow their children to eat and drink every thing they desire, and to gorge their stomachs, till diseased action of the organs connected with digestion necessarily ensues, accompanied with the other disorders which necessarily follow in its train.

"To the same cause is owing the practice of administering to infants, cordials, elixirs, laudanum, and spirituous liquors—a practice in which no person will indulge who is acquainted with the laws that regulate the functions of the corporeal frame, and which has a tendency not only to injure the individual, but to perpetuate the race through successive generations. From ignorance of the nature of *perspiration*, and the *functions of the skin*, children are permitted to wallow in dirtiness and filth, to remain moist, cold and benumbed, and to pass days and even weeks without being washed or receiving a change of linens, by which they are, sooner or later, subjected to cutaneous and inflammatory disorders.

"Ignorance of this subject has likewise led to those awkward attempts, particularly on the part of the female sex, to remodel the human frame, as if they could improve the mechanism and symmetry devised by Infinite Wisdom. Hence the derangement of the physical system, produced by laced stays, straight jackets, corsets, and other absurd articles of dress, by which the ribs are compressed and the spine bent out of its place, and the expansion of the lungs prevented ; the consequences of which are, diseases of the breast, shortness of breath, external callosities, defective digestion, tubercles of the lungs, and a tendency to pulmonary consumption."

Dr. Dick, with many others, laments the neglect of Physiology in our schools. The following is the language he uses on this subject :

"This is a department of knowledge which has never yet been introduced into any seminary, as a branch of general education.* It is somewhat unaccountable, and not a little inconsistent, that while we direct the young to look abroad over the surface of the earth, and survey its mountains, rivers, seas and continents, and guide their views to the regions of the firmament, where they may contemplate the moons of Jupiter, the rings of Saturn, and thousands of luminaries placed at immeasurable distances—that while we direct their attention to the structure and habits of quadrupeds, birds, fishes and insects, and even to the microscopic animalculæ in a drop of water—we should never teach them *to look into themselves*, to consider their own corporeal structure, the numerous parts of which they are composed, the admirable functions they perform, the wisdom and goodness displayed in their mechanism, and the lessons of practical instruction which may be derived from such contemplations."

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* That is to say, it never had been, in Great Britain, eight or ten years ago, when Dr. Dick wrote. Some changes in this respect have since taken place, not only in Britain and on the continent, but also in our own United States.

He next quotes, with much approbation, certain remarks of ours, communicated to the "Annals of Education," in Sept. 1833—nearly ten years ago. The remarks follow.

"The person who should occupy a dwelling seventy, eighty, or a hundred years, and yet be unable to tell the number of its apartments, or the nature and properties of any its materials—perhaps not even the number of stories of which it consisted—would be thought inexcusably ignorant. Yet with the exception of medical men, and here and there an individual belonging to the other professions, is there one person in a thousand who knows any thing about the elementary materials, the structure, or even the number of apartments in the present habitation of his mind?"

"It is not," says Dr. D., "because this study is either uninteresting or unaccompanied with mental gratification, that it is so generally neglected; for to *know ourselves*, both physically and intellectually, is one of the first duties of man; and such knowledge has an extensive practical tendency, and is calculated to gratify the principle of curiosity, and to produce emotions of admiration and pleasure."—He then proceeds with his quotation from our own article.

"Does it afford no pleasure to study the functions of the stomach and liver, and other organs concerned in changing a mass of beaten food—perhaps some of the *coarser vegetables*—into blood? of the heart, and arteries, and veins, which convey this fluid, to the amount of three gallons or more, through all parts of the body, once in four minutes? of the lungs, which restore the half-spoiled blood to its wonted purity, as fast as it is sent into them, and enable it, once more, to pursue a healthful course through its ten thousand channels? of the brain, and especially the nerves, which by their innumerable branches spread themselves over every soft part of the human system (and some of the harder parts) which they can possibly penetrate, in such numbers that we can no where insert the point of the finest needle without piercing them? of the skin, every square inch of which contains the mouths or extremities of a million of minute vessels? Is all this, I say, uninteresting? Is there no wisdom displayed in the construction of so complicated, and yet wonderful a machine, and endowing it with the power of retaining an average heat of 96 or 98 degrees, whether the surrounding atmosphere be heated to 100 degrees or cooled to 32, or even to a much lower point? Is there, moreover, no mental discipline involved in the study of physiology?"

"But it will naturally be asked," says Dr. D., "how shall we find means to communicate a knowledge of physiology in common schools? A thorough knowledge, indeed, of this subject, such as a regular medical practitioner requires, cannot be communicated in such seminaries, nor would it be necessary or expedient to make the attempt. Human subjects could not be dissected before the eyes of the young, nor would it be proper to accustom them to witness such operations. A *general* knowledge of the parts of the human frame, of their relative positions, and of the functions they perform in the animal system, is all that is requisite to be imparted.

"1. It is well known that the skill of the anatomist, combined with that of the modeller, has enabled him to construct a model or representation of the human system. This model, which has sometimes been termed a *manikin*, or artificial man, is formed with so much skill and ingenuity as to exhibit the principal veins and arteries, the nerves, the muscles, the lungs, the liver, stomach, kidneys, and most other parts, nearly as distinctly as they appear in the real human subject. Such a model, could it be procured, would answer all the purposes of *general* instruction. The only valid objection that could be made to its introduction, would be the expense with which it would be necessarily attended.

"2. But an idea of the form and position of those parts connected with the vital functions, which are contained in the thorax and abdomen, may be obtained by dissecting some of our domestic quadrupeds. Although the mechanism of these animals is somewhat different from that of man, yet the organs contained in the cavity of the breast and abdomen are essentially the same, though differing in some minute particulars—are placed in nearly the same relative positions, and perform the same or similar functions as in the human system.

"As hares, rabbits and other quadrupeds are frequently slaughtered for food, and as dogs and cats sometimes require to be killed, opportunities might be taken of dissecting such animals, and showing the forms and positions of those parts which most nearly resemble those of the human subject. I recollect, when young, having received my first clear ideas of the form and position of the lungs, heart, liver, kidneys, stomach, &c. from the dissection of a cat, of which the anatomical figures I had in my power to inspect could afford no accurate or satisfactory conception.

"3. Dried preparations of certain parts of the human body—portions of the muscular parts, such as the heart, stomach, &c., preserved in spirits—skulls and detached portions of the skeleton—might be occasionally procured, which might serve for the illustration of particular functions.

"4. Where such objects as the above cannot be procured, some general and useful ideas on this subject may be communicated by means of *large colored anatomical plates*. These are found necessary to accompany every course of anatomical dissection; and although they cannot convey the same accurate ideas which may be obtained by a direct inspection of the human subject, yet none will deny that a considerable degree of useful information may, in this way, be obtained, especially with the assistance of a teacher who can explain, with simplicity and clearness, the several organs and functions of the animal system. There would be no necessity for exhibiting or describing any other parts or organs but those which are common to both sexes. The female sex, however, as well as the male, ought to be instructed in this science; for as females have the physical education of children more immediately under their control, it is of vast importance to the human race at large, that they should be endowed with that knowledge of the functions of the human frame, which will enable them to conduct such education with intelligence and discretion.

"There is no department of science, moreover, in which a pious and intelligent teacher has a better opportunity of directing the minds of his pupils to the *evidences of design*, and of descanting on the wisdom and benevolence of the Creator, than when describing the mechanism of the human frame. In the various articulations of the bones, in the construction of the venous and arterial system, in the process of respiration, in the circulation of the blood, in the muscular and nervous systems, in the motion of the heart, in the mechanism of the eye and ear, in the construction of the spine, the hand, the skull, and other parts of this admirable machine, the divine wisdom and benevolence shine conspicuous; and when clearly exhibited to the young, must impress their minds with the truth that they are, indeed, '*fearfully and wonderfully made*,' and that they ought to consecrate the temple of their bodies for a habitation of God through the Spirit.

"One great practical end which should always be kept in view in the study of physiology, is the invigoration and improvement of the corporeal powers and functions; the preservation of health and the prevention of disease. For this purpose frequent instruction, illustrated by examples, should be imparted in relation to *diet and regimen*. The young should be instructed in the laws of the animal economy and the sources of diseases; the practices which induce certain disorders, and the means of counteracting them; the functions of the skin, lungs, stomach and bowels; the nature and importance of insensible perspiration; the means of regulating it, and the evils which flow from its obstruction; the rules which should be observed in bathing and swimming; the importance of pure atmospheric air to the health and vigor of the animal system; the circumstances by which it is deteriorated, and the means by which its purity may be preserved; the necessity of *cleanliness* in respect to the hands, face, neck, and other parts of the body, and to the clothes, linens, blankets, sheets and household furniture, and the rules which should be attended to for preserving the person and dwelling from noxious effluvia; the articles most proper for dress, and the mode of constructing it, so as not to impede the vital functions; the proper use of *food* and *drink*, and especially the moral and physical evils which follow from intemperance and the frequent use of ardent spirits; the exercise and rest requisite for body and mind, the means by which they may be duly proportioned, and the evils which arise from *immoderate* exertion, either of the mental or corporeal powers; the improvement of the organs of sensation, particularly the organs of vision, and the treatment requisite for preserving them in health and vigor.

"Instructions on these and similar subjects, when occasionally illustrated by striking facts and examples, could scarcely fail to exert a powerful and beneficial influence on the minds of the young, on the families with which they are connected, on society at large, and even on succeeding generations. That such information has never yet been regularly communicated in our schools and seminaries, reflects disgrace on our scholastic arrangements, which are frequently directed to other objects of far inferior importance. Till such instructions be generally communicated in connection with other portions of useful knowledge, man will never rise to the highest dignity of his physical and intellectual nature, nor enjoy the happiness of which he is susceptible even in his present state."

BARON DE SACY.

Few men, of the most vigorous bodies, have done more, in the compass of fourscore years, than Baron de Sacy. One would be tempted to think, from the review of a catalogue of his labors, that he must have been a very Hercules in body and mind. Yet it was not so. As early as the age of seven years, the state of his health was so delicate that he was not permitted to attend school, but was instructed by a private tutor. This, however, did not invigorate him; on the contrary, he pushed his studies to an excess, by night and day, that ere he had reached maturity, had greatly injured his eyes and stomach. He never recovered from the effects of his night studies during his whole life.

Let us review his life, to see what a sick man may do. We copy from the Boston Recorder, and begin with the year 1785, when he had completed his studies,* and was about 26 years of age.

In 1785, he applied himself to the composition of his two Memoirs on the Ancient History of the Arabs, and on the Origin of their Literature. He soon commenced his admirable Memoirs on the various antiquities of Persia, such as the monuments which adorn the cities of Persepolis and Kirmanshah, bas-reliefs, coins, medals, &c. During the horrors of the revolution, he employed his leisure moments in composing his great work on the Religious System of the Druses. In 1799, he published his Principles of General Grammar, which has been translated into Danish, German and English; the last named was made by Mr. Fosdick. In 1806, appeared his Arabic Chrestomathy, in three large volumes 8vo. In 1810, the first edition of his Arabic Grammar was published; the second was issued in 1831, in 2 vols. 8vo. In 1810, he published a French translation of an Arabic account of Egypt. He was also a frequent contributor to various periodical journals. In 1815, he was appointed rector of the University of Paris, a post which had been filled by Rollin. In 1819, appeared the "Book of Counsels," in Persian and French, with notes. In 1823, he was nominated Principal of the College of France, and of the Special School of Oriental Languages. In 1832, the king created him and the illustrious Cuvier peers of France. He was soon after nominated inspector of Oriental types at the royal press, conservator of Oriental MSS. in the king's Library, and perpetual Secretary to the Academy of Inscriptions. His last work, which was published in

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* These, we ought to say, besides being liberal in other respects, included a knowledge of the Hebrew, Syriac, Chaldee, Samaritan, Arabic, Ethiopic, Persian, Turkish, Italian, Spanish, English and German languages.

December, 1837, was his History of the Druses, which had been on his hands more than forty years. M. de Sacy died on Wednesday, February 21, 1838, aged 80 years. His funeral was attended with extraordinary marks of respect. A medal was struck in his honor, and his bust was placed in the Library of the Institute.

If it is asked how he could accomplish so much and last so long, the reply is, by obeying the natural laws of the Creator; or in other words, by taking care of himself. He rose early, though not till he had slept enough to answer the demands of nature; he used much exercise; he ate sparingly, and he kept his mind occupied. He was, moreover, cheerful.

When he was a little over 30 years of age, and the revolution broke out at Paris, where he resided, he withdrew, with his family, some leagues from the capital, and divided his time between literary labor and the cultivation of his garden; and he might be seen, by turns, wielding the pen and dressing his trees. Notwithstanding the great difficulty which it presents, he was one of those who can attend at once to the most arduous studies and to the produce of his fields. His literary researches, however, obliged him to visit the capital weekly; in which excursions it was his custom to walk.

We have alluded to the greatness of his labors. Yet he was a man of business as well as science. His precision and accuracy, his indefatigable activity, the skill with which he invariably retained a command over his tongue, and the consummate address he could at times employ, enabled him to take part in every thing, and to speak on every subject. Was a report to be drawn up on any matter whatsoever, he was prepared for it; and what is most remarkable, his ordinary pursuits went on, in the mean while, as if he had nothing else to attend to.

On the one hand, as a writer has well said of him,

M. de Sacy was ornamented with that unceasing ardor which dispenses with all repose, and which might have been truly called the sacred fire; and on the other, he possessed the rare gift of being able to pass continually from one subject to another, without loss of time. When he went any where, if he was likely to have an hour, or even a quarter of an hour unoccupied, he took care to furnish himself with a book or some sheets of paper; and he turned those moments to account, however short.

One remark should be made here in reference to the fact of his needing but little repose, which is, that such active minds as his, fired continually with the desire to please God and benefit mankind, do not need so much repose, nor, in truth, so much *sleep*, as other men; and it remains to be seen, in the progressive developments which the Christian religion is likely to produce, how little sleep will suffice for those who are trained in the spirit and temper of Christ, and wholly devoted to his service in advancing the cause of virtue and piety.

It is also said by some, that a literary life and agricultural labor cannot be combined. But the experience of M. de Sacy is not favorable to such a conclusion. He could do a great deal of work, and yet go on with his literary labors as though nothing else occupied his attention. It is said that at times he used to thrash with the peasants; although from his diminutive stature, weak eyes, and feeble appearance, they often refused his assistance, supposing he would hinder more than help them.

There is one important and very obvious lesson to be learned from considering the character and habits of M. de Sacy. If with his feebleness he could prolong his days to fourscore, what might not the same effort accomplish when applied to those who are born with firm constitutions, and who never impair them by night labors or by excesses?

The truth is that we can seldom induce a man, who is strong and vigorous, to take any care of his health. It is not till we have destroyed ourselves, that we will begin to heed the warning voice. Hence it is that the strong and healthy often break down sooner than the feeble or sickly, who husband the few resources which still remain to them.

In the present low state of humanity, it is hardly possible to form a conjecture concerning the vast accession which would be made to knowledge, virtue and happiness, would all mankind take as much care of their health—to say nothing more—as did M. de Sacy. For if the feeble would so live as to accomplish as much in their several vocations, during a period of fourscore years, as he did, and the strong as much more in proportion to their strength, during a period which should be longer in the same proportion, who can calculate on the change which would be accomplished? For if the sickly can be made to pass through life in ceaseless employment, the strong ought to do so. Should we not thus be free, or nearly so, from loss of time and strength by disease, not only to 80 years, but to 100, 150 or 200? Indeed, in regard to the extent of human life, in a condition of society where all should obey all law, through a long series of generations, it is idle, as it seems to us, to form any conjectures. He who wishes to get a glimpse of the glories in reserve for those who are to come after us, should read with care the sixty-fifth chapter of the prophecy of Isaiah.

DISEASES OF THE SKIN.

Most diseases, says Dunglison, in his Physiology, are probably produced by irregularly impeded cutaneous transpiration. By exposure to currents of air, he adds, or to the irregular action of cold, in any manner, on the surface, the depuration of the part is morbidly modified; and owing to the extensive sympathy existing between every part of the capillary surface, any organ which may be at the time particularly predisposed to irritation, is affected with disease. In other and plainer words, if the skin ceases, for any considerable time, to perform those offices which have been mentioned in a former number, an attempt to perform the work is made by other organs, such as the lungs or the intestinal canal, which being often weakened and unable to do more than their own part of the labor of the system, are over-tasked by the additional burden of working for their neighbors, and become diseased.

The principal office of the skin, as we have seen both in former numbers and in the foregoing extract from Dr. Dunglison, is to serve as a medium of daily conveyance from the system of several pounds of fluid, containing waste or worn out or putrid particles, which it is no longer safe to retain. This, however, is not its only office. It is an absorbent, a regulator of the temperature, and the seat of the sensation of touch.

Now there are several conditions of the skin which interrupt the fulfilment of these important offices. First, it should be free and uncompressed. Secondly, it should be of a proper temperature; neither too hot nor too cold. Thirdly, it should not be over-stimulated. Fourthly, it ought to be kept clean—not merely in parts or patches, but throughout, and continually.

The first of these conditions is interfered with when we dress any part of the body tightly—a custom fearfully common. The second, when we wear too much clothing, live or sleep in too warm rooms, sleep on feathers, &c. The third law—for we may as well speak thus as to say *condition*—the third law, we say, is violated when we wear clothing which not only keeps us too warm, but which is too irritating. Thus flannel, however grateful it is to our feelings, no doubt irritates the skin too much, especially in infancy, childhood and youth, and thus, in the end, proves a cause of disease. The fourth law is violated when we do not change our clothing often enough, and when we do not practice daily bathing.

The penalties for violating these laws, or if we choose to say so, the consequences of not fulfilling these conditions are, first, colds, consumptions, sore throat, pleurisy, peripneumony, lung fever, quinsy, other swellings of the glands of the throat, ear disease, headache, and sore eyes; secondly, inflammations of the stomach and bowels, diarrhœa, cholera, dysentery, convulsions, &c.; thirdly, scrofula, bilious complaints, rickets, worms and fevers; fourthly, diseases of the kidney and bladder; and fifthly, diseases of any part which sympathises strongly with the skin.

The truth is, that there is hardly a disease of the whole human system which is not either excited or aggravated by every neglect or abuse of the skin; and still more by long and repeated neglect and numerous abuses conjoined. No wonder then that Dr. Dunglison should say that most diseases are attributable to this source. Neither is it to be wondered at that we have so much disease among us, and such complicated and severe forms of disease. The wonder is that we enjoy so much of comparative health.

How immensely important, then, that the laws of the skin should be obeyed. If most of our diseases come of disobedience or neglect of these laws, ought they not to be inculcated as a part of education. Yet where and by whom have they been so? What family—what father, what mother—has made it a *sine qua non* in domestic education, that the child should know and understand the only condition upon which he can hope to escape a large share of the physical ills to which flesh, in its present estate, is subject? In what school—what common or public school we mean, the school in which nineteen twentieths of our population receive all the instruction, beyond the family precincts, which they ever *do* receive—is it made a first and indispensable element of instruction? Nay more; is there one person in twenty of what is called liberal education, who has a practical knowledge of this matter? Are there not ten times as many of our professional men who understand Hebrew and Greek and Latin, and Homer and Virgil and Ovid, as of those who understand the laws of their own bodies?

REASONS FOR KEEPING COOL.

It is a fundamental law of Hygiene or Health, that we should keep as cool as we can and not be permanently chilly. This law is violated in a thousand ways, and that continually, in all civilized society. It is especially violated by the use of heating and heated food and drinks, by too much and too warm clothing, and by rooms which are over-heated.

Among the many reasons which exist for keeping our *rooms* as cool as we can and not feel uncomfortable, are the following:

1. Heated air is a better receptacle of unhealthy ema-

nations and bad gases—except the carbonic acid gas—than that which is cooler.

2. When we breathe heated air, we take less oxygen into the lungs than if the air were cooler. Consequently the chyle cannot be so well changed into blood, nor the venous or contaminated blood so well purified. Yet at the same time we *consume* more oxygen, as has been well ascertained? Must there not be evil in all this?

3. Hot air, in frequent contact with the lungs, at length enfeebles them. For though cold air is much warmed in passing through the mouth and nostrils and bronchial tubes, hot air is not cooled by the same means, unless hotter than the lungs themselves—a condition of things which but rarely happens.

4. We perspire a great deal more in an elevated temperature than in a low one. This, if carried far, is a source of debility. We perspire about three times as much at 100 degrees as at 68.

5. Heated air, constantly applied to the skin, produces the same effect which is produced on the lining membrane of the lungs. It relaxes, enervates, and finally disorders it. And when the functions of the skin and lungs cease to be properly performed, and especially whenever the waste and poisonous fluids which ought to escape through two great surfaces of fifteen feet or more each, are suppressed, it is by no means a matter of surprise that colds, consumptions and other lung complaints—to say nothing of other diseases—should inevitably follow.

6. Again; it is the more necessary to avoid undue heat, because with the means of securing it—we mean stoves and furnaces—is involved almost of necessity, an increased neglect of ventilation. For, as a general rule, we save heat by these fixtures just in proportion as we prevent a change of the air in our rooms—retaining it, with its gases, to breathe it over and over again—and thus

prevent, more and more, the proper and necessary depuration of the blood.

7. Digestion, circulation, secretion and innervation are all better performed in cold air—not indeed too cold—than in that which is heated. The lower, therefore, the temperature in which we can be comfortable, the better, even in these respects.

8. Another and a highly important reason why we should keep as cool as possible, is, that every degree of unnecessary heat renders us more susceptible to the bad influences of cold, whenever we are exposed to it afterward; and by consequence, the more we indulge in hot air in our rooms, the more we may, and indeed must. Of the truth of this every one may be satisfied who will attend to his own sensations, in the varied circumstances of most rooms which are artificially heated.

How often is it, that though we are perfectly comfortable with the temperature at only 60 degrees, we suffer it to rise gradually to 70 or 75, or even 80 degrees. Yet all this while we scarcely feel too warm—on the contrary, the heat is rather, for a time, say for an hour or so, a source of gratification. But let the temperature fall down again, even as gradually as it was elevated, and do we feel comfortable any longer at 60 degrees? Do we not feel quite uncomfortable long before the mercury reaches 60 degrees? Do not the feeble even feel a perceptible chill? But why are we not as comfortable at 60 degrees as we were two hours before?

The great reason—though there may be other minor reasons—for all this is, that our power of generating heat within has been weakened by the unnecessary elevation of temperature. For it should be known that we are warmed chiefly—or ought to be—by the activity of the various functions, especially by the activity of the brain and nerves, the lungs and heart, and the skin. The ten, fifteen or twenty degrees of extra and unnecessary heat, have weakened all these functions, and consequently lowered the internal fire to which we have alluded.

The knowledge of the fact—so well substantiated—that every degree of unnecessary external heat, though it may be agreeable at the time, is injurious in the end, should be every where inculcated. If people will transgress a law of health of this sort, they should do it with their eyes open to the consequences. But they will not so often transgress if their eyes are truly opened. The domain of conscience being extended, that vicegerent of the Almighty will here and there utter her monitory voice, on a topic where once she was silent; and though again and again disregarded, will here and there be obeyed.

We will not denounce stoves and furnaces and improved fire-places; but we *will* say, that unless more attention is paid to the laws of ventilation and temperature, they will prove, as they have hitherto often done, a curse rather than a blessing. We must cast them aside, or study the laws of hygiene, or continue to suffer; for beyond these there is no alternative.

AMOUNT OF SLEEP.

Why is it that every one is ready to ask, not how many hours we ought to be awake, but how many we ought to sleep? Is it that cessation from labor—nay, more than mere cessation, a sort of vegetative or worse than mere vegetative existence—is the main thing in human life, and wakeful activity mere drudgery? Is it that we are best fulfilling the end of our existence, when we are most like the bat, the marmot, or the swine?

Let us look, for a moment, at facts. No point is better established than that he whose mind and body are most active—provided, indeed, that this activity does not go so far as to become a diseased activity—needs the least sleep; and the contrary, that he whose mind and body are least active needs the greatest amount. In other words, the more truly alive we are by day, the longer our day will be; and the contrary.

Now has any one ascertained the exact extent to which his day can be extended? Has any one found out what is the maximum of healthy thinking and acting? If so, that individual may be able to tell us how much *he* may be awake in twenty-four hours. He may be able to understand, from experience, the full import of the Scripture which says—"Redeeming the time because the days are evil."

One who believes that sleep is the truest enjoyment of human life, may be pardoned for making the inquiry, How much should we sleep. He who sleeps all he can without sustaining positive loss in his property, his reputation, or his health, and only rises because he *must*, can hardly be expected to inquire how much he may or should be awake.

There is no reason for believing that Wesley and Lord Coke and Jeremy Taylor abridged their lives by reducing their sleep to four, five or six hours a day. Yet the difference between sleeping six or eight hours in twenty-four is equal, to him who survives to the age of fourscore, to ten additional years of active life. Or if the average duration of life were forty years, it would be a gain of five years to each individual.

What we have said has indeed been said upon the assumption that all mankind now sleep eight hours; which we believe to be the average time. It has also been assumed that whether we sleep six or eight hours, we are fully awake the rest of the time. For he cannot be said to redeem his time who reduces his sleep an hour, only to be stupid at other times, and lose an equivalent of his waking hours by his stupidity.

But suppose five years redeemed from sleep by each individual of the human race, and forty years to be the average duration of life. It would lengthen its several stages—infancy, childhood, youth, manhood, and advanced life—each of them a year longer than otherwise they would be. This would be to add one eighth to the whole duration of life. He who would otherwise come to forty years—the average—would come to forty-five; and he who would otherwise reach eighty, would, to all intents and purposes, come to ninety.

Nor is this the whole gain. We have said nothing, as yet, of the tendency of such a course to add to mental or bodily vigor, and increase the years of our lives, as they are usually reckoned. No doubt there would be, in this respect, great gain. He who should be self-denying enough to reduce his hours of sleep from eight to six, would be apt, as a general rule, to rise early; than which few habits are more conducive to health and long life.

But let us look at the gain of five years to an individual. What an amazing accession to human life; and if life is a blessing, what a source of happiness? It is like adding a hundred millions of inhabitants to the eight hundred millions which the earth is now supposed to contain; and to repeat the addition in every generation.

There is another thought which it may be worth while to entertain, at least for a moment. It is usually said that time is money. If so, why should not the addition of five years to human existence be an addition, in the same proportion, to human wealth? Why should not a state or nation be virtually worth an eighth more for having all its subjects redeem an eighth of their time? And why, too, should not *each person's* dividend be really and truly increased? Why should not he whose present dividend of the public wealth is $1600, have it in this way increased to $1800?

For it should not be forgotten, that if the population of a country be a million, and the property three hundred millions, so that the dividend of each family of five persons would be $1500, every family has the benefit of that sum, to a certain extent, whatever may be its possessions nominally. If one is nominally worth $2500, and another but $500, it is still true that for the time being the latter has some of the benefits of the surplus $1000 of the former. We do not say that he shares equally with the nominal possessor; but he shares with him in a degree. God in the constitution of things has so ordered it; and in this respect, what God has connected, man not only may not but cannot wholly separate.

Yet after all, we love to think most of the great intellectual and moral gain which by redeeming our time we may secure. We say *may* secure; for unless we are rightly disposed, all such gains contribute to the advancement of the empire of darkness and sin, rather than to the progress of knowledge and holiness. Our hope is that he who sleeps six hours instead of eight, will have his head the clearer and his heart the better for it. We certainly should augur the contrary from the addition of two hours to the number *already* spent in bed; and is it not a bad rule that will not work both ways?

One thing more. Seldom indeed are we as effectually restored by sleep as we should be if we fulfilled all its conditions. First, we must be sufficiently fatigued. Secondly, we must not be *over*-fatigued. Thirdly, the bed whereon we rest should be of a proper quality. Fourthly, the food of the previous day must have been of a healthy character. Fifthly, the air in our sleeping rooms should be pure. Lastly, we need, above all other conditions of sleep, as Franklin would say, a *good conscience.*—Now the more sound and healthy our sleep is, the sooner we are restored by it.

ABSTINENCE FROM DRINKS.

The following somewhat curious experiment, (which has been variously understood,) was made for the purposes which are mentioned; but it also illustrates the great power of habit. It was first published in the Boston Medical and Surgical Journal, by request of Dr. Smith, the editor.—We are unwilling, however, to suffer the article to appear without protesting against the doctrine of abstaining wholly from drinks, as a general rule, by persons in health; and our only object in inserting the article in this journal, is to set the public mind right on this subject.

To the Editor of the Boston Medical and Surgical Journal:

Sir:—At your request, I send you the story of two very curious, and I would fain hope instructive experiments, made for a purpose which will appear in the progress of the narrative. Let me premise, however, that I do not consider these experiments as having much bearing on the great question of cutaneous absorption. There is no reason to believe that any more fluid was received into the system, either through the skin or the pulmonary tissue, than usual; and it is not very philosophical to refer to another cause those effects for which the character of the ingesta will sufficiently account.

For many years I had drank nothing *with my meals*, believing it better to let the teeth and salivary glands perform their whole office. As my food was plain and unstimulating, I was seldom thirsty between meals, so that I gradually fell into the habit of drinking nothing at all—sometimes for whole weeks together.

The thought struck me, one day, after an abstinence of several weeks, that I would try the effects of abstaining for a period still longer. Accordingly, for the nine months and twenty days which followed August 6, 1839, I drank nothing, and was only thirsty ten or a dozen times during that whole period. My food was, as usual, farinaceous vegetables (including, of course, a full proportion of bread) and fruits. I used no more liquid food than I had been accustomed to use—perhaps about two gallons of milk in the whole time in the way of condiment, and half a dozen pints of water gruel.

But as this season of abstinence did not include the hottest part of the season—a season when perspiration is apt to be most free—I was not satisfied with the results, and accordingly drank nothing from January 1, 1842, to the end of the year.*

If it is asked whether I experienced no thirst during these long seasons of abstinence, I answer—yes, occasionally. When I spoke or conversed two or three hours in succession, with great earnestness or vehemence, or when I ate salted, or sweetened, or highly concentrated food, I sometimes felt thirst, but it soon passed off, except in the case of salted food. I have sometimes been quite thirsty from long speaking, and yet on desisting but ten minutes, the thirst wholly disappeared. But salt in food, when in excess (producing as it does a degree of inflammation of the mucous membrane of the stomach and adjacent parts) is not so easily got rid of. It was on one of these occasions that I yielded to the desire to drink, and shortened my first experiment. By avoiding the use of salted food, I have been able to go through the past year without suffering. In fact, I can truly and honestly say, that except in a single instance, I have suffered less from thirst, so far as I can recollect, than during any previous year of my whole life.

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* I returned to the use of drink March 2.

The exception just referred to is as follows. Fearing it might be said, that as I was a sedentary man, the experiment was not a fair one, I went to work late in July last, at haying. The day was excessively hot, and I labored beyond my strength. Thirst came on, somewhat severe, to obviate which I gargled my throat several times with cold water. The second day I did the same, though not so frequently. I also ate liquid food during the two days, viz. bread and water; the bread being broken into the water, as many break it into milk. There was the greater necessity of doing this, as I had no good fruit, just at this time, to form a part of my meals. After the lapse of two days, I felt no more thirst, although I continued to labor as hard, and the heat was about as great as before.

Should it be asked whether I perspired freely, and whether the kidneys performed their proper office, I reply, that there was no profuse perspiration at any time, except during the first day's labor. At all other times perspiration was gentle, though free. The kidneys sometimes seemed a little inactive, though not generally so. For the most part, the functions of the body and the faculties of the mind have been about as usual.

This allusion to the state of the mental faculties, reminds me of the necessity of correcting an error which has gone abroad, in relation to these experiments, and which may have done temporary injury to the cause they were designed to promote. It has been intimated that I was a believer in total abstinence from all drinks, even water; than which nothing can be more untrue; and I respectfully request those editors who have contributed to this impression, to copy this article into their papers.

But why, then, some may still ask, should I hazard such experiments? The question is a fair one, and shall be fairly answered.

As to hazard, in the first place, there is none, in a case like my own. The man who can maintain perfect vigor of body and mind in the use of a diet of bread and fruits, and succulent vegetables, hazards nothing in abstaining from any other fluid than what is contained in his apples, pears, strawberries, whortleberries, currants, melons, potatoes, beets, turnips, &c. Even bread contains much water. *He* will not suffer whose food, for the day, includes from two to six pints of water.

But the great object of the experiments, in the second place, was to prove, for the benefit of the friends of temperance, that if our food is simple and plain, we need but little drink. It is well known that one fruitful source of that morbid thirst which every where prevails, and which is the predisposing cause of a large share of our intemperance, is high-seasoned, over-stimulating food. Let every source of undue mental and physical excitement be avoided in the education of each rising generation, and there is hope that in due time the great end which the friends of temperance have in view may be accomplished. Did mankind, from the earliest infancy, yield strict obedience to all the laws of their being, three fourths of the water now poured down—not *drank*—might be dispensed with; and every other drink, except water, might be banished from society.

MIXTURES OF FOOD.

The advice of Horace, on the subject of food, is not to make mixtures. Paris objects to them, and Dunglison says, all sorts of " made dishes " are an abomination. Indeed, so common was the notion of their unfavorable tendency, that as long ago as the days of Tissot, it was common to take it for granted. We need not insist, says the latter author, upon the impossibility of different articles of food being perfectly digested. The mixture is one of the causes which ruin the constitution of the most vigorous, and destroy the feeble; it cannot therefore be avoided too carefully.

Yet where shall we go to find a table free from mixtures? It is not the mince pie alone which, in the view of medical men, constitutes the "abomination;" though it is true that they have not, in every instance, been careful to define their terms. Dunglison, however, goes so far as to raise doubts in the minds of his readers, against the salutary tendency of all sorts of condiments; and to the admixture of butter, eggs and even milk. Yet how few of our dishes escape the contamination of one or another of these articles?

Bread, indeed, is sometimes made without them; though by no means always. Those who have milk in abundance, are very apt to "wet their bread" with it. But though the baker and a part of our house-keepers omit it, a very small number of persons can be found who will eat bread with any freedom till butter or milk is added.

But beyond plain bread, in very moderate quantities, what do we eat, at tables at all fashionable, into which grease of some sort, eggs or milk does not enter? Is it flesh or fish? Who prepares fish without the addition of butter or cream? Even flesh meat without much fat, and sometimes with it, is often spoiled with butter? Who could eat steak without it? Even our plainest people in boiling what they call "pot luck," must have pork and beef together, if possible, because the beef does not always contain fat enough.

What cakes or biscuit—the plainest—are made without the admixture of one or more of these three ingredients? Indeed cake would not be cake without butter, eggs or milk, or perhaps all three.

So of puddings. What house-keeper can make these without milk or eggs or cream; or what mortal can eat them without milk, cream or butter after they are made?

Again, of vegetables. "I tried potatoes without butter the other day, in compliance with your suggestion, but could not make it go;" said a friend of ours, whose eyes were beginning to be opened. With whom will potatoes, or rice, or sago, or onions, or tomatoes "go," as it is called, without butter; or beans, or peas, or beets, or carrots, or even turnips, without butter or pork grease?

In short, the poorest person in the community would think himself reduced to worse than prisoners' fare, who should be denied, for any considerable number of meals in succession—in fact for *one*—all sorts of mixtures; the punishments denounced against them by natural law to the contrary, notwithstanding.

IMPROVED COOKERY.....No. I.—EGGS.

Tissot says of eggs—"The best mode of eating them is from the shell, or after they have been dipped three or four times in boiling water, or into hot but not boiling broth." But we live in a day when people like to know the "why and because" of things. Let us then ask the why and because of this mode of cookery.

Tissot says—"The white of the egg, when cooked too much, is hard, and will not dissolve; it becomes heavy and indigestible, and does not nourish." The truth is, that the white part of an egg is what the chemists call *albumen;* and is coagulated at a temperature of 165 degrees of Fahrenheit; and when once coagulated, does not readily become soluble in the gastric juice. Eaten without cooking, therefore, it is soluble; and so it is when dipped in boiling water.

But why dip it in boiling water, and not in boiling broth? it may be asked. Because water boils at 212 degrees, but broth being oily is much hotter at the boiling point. Of course we cannot say exactly how much hotter, because the quantity of oil may vary much. Oil alone boils at about 600 degrees. When therefore we merely dip eggs in boiling water a few times, the shell prevents the white part of the egg from being subjected to a greater heat than 165 degrees; but if dipped in boiling broth, which should happen to be at a heat of 300 degrees or more, it might strike through.

Tissot's suggestions are therefore, as we see, reasonable, and deserve consideration. But there is a method of cooking the egg—for those who choose to cook it at all—which we think preferable;—though we are not sure that it has not been before presented. It is as follows:

Heat some water in a vessel to about 150 degrees; put in your eggs, and then endeavor by the aid of a thermometer to keep the temperature at about 160 degrees—never by any means suffering it to rise to 165 degrees—about 20 minutes. The time however may be varied according to the varied tastes of people. Some will like them best cooked 15 minutes; others would extend the time to 30. This method of cooking the egg has been called *stewing*.

But why use the egg at all? And by what moral right? True, it is nutritious; but scarcely more so than rice, or bread, or beans and peas. Let us compare the expense.

Suppose a dozen of eggs to weigh two pounds; we believe, however, they weigh less. The cost to the purchaser we will place at twenty cents. This is ten cents a pound. Two hundred pounds of eggs will of course cost twenty dollars. But two hundred pounds of wheat flour will cost but five or six dollars; and two hundred of rice, scarcely eight; yet either of the latter is worth as much to sustain life, and is quite as wholesome, as eggs. A family of five persons, eating eggs for breakfast the year round, rice for dinner, and wheat bread for supper, would expend much more for their breakfast than for both the other meals. If it should cost a family a dollar a day, or $365 a year to live wholly on eggs, it would cost little more than $100 to live on bread, and $140 on rice. It would cost a nation of 20,000,000, $1,460,000,000 a year in the first case, $400,000,000 in the second case, and $560,000,000 in the third. And the difference holds the same in proportion, whether we eat wholly of these articles, or only a part.

Would a nation of Christians have a right, *in view of these facts*, to use eggs? Would an individual?

But we have not told the worst. Rye and corn, which are almost as nutritious as eggs, cost still less, by about one half, than wheat flour or rice. And so do many other good articles of vegetable food, to say nothing of milk and plain meats.

CHAPTER OF INTELLIGENCE.

National Institute.—A committee of this newly organized association, consisting of five distinguished physicians, among whom we find the names of Drs. Sewall and Lindley, of Washington, have addressed a circular to professional men throughout the country, requiring information on various points of great interest. Nearly all of them relate to health. The third, eleventh, twelfth and thirteenth of these inquiries are as follows:

"3. What manufactories are there in your district, and what is their effect upon the constitution and health of the operatives?

"11. Have you any cases of great longevity; what have been the occupation and habits of such persons, and were they natives of your district, or emigrants, and from what country and place?

"12. Have you any persons who live exclusively upon a milk or vegetable diet; and what is the apparent effect of such diet upon the duration of life, the health, strength and activity of body and mind?

"13. What has been the effect of the temperance reformation upon the strength and health of your citizens?"

Fruit of the Vine.—The public of this vicinity have at length an opportunity to purchase that which appears to be the real fruit of the vine, unfermented. We have heard, for many years, of the pure juice of the grape; but this pure juice of the grape may be, and we suppose is, for the most part, *fermented*, if not *drugged.* But Mr. Spaulding, No. 14 Bromfield Street, in this city, has for sale grape juice, in the form of syrup, imported, as he says, under the direction of Rev. Isaac Bird, late missionary to Syria. We hope and trust there is no mistake about this last, and that it has undergone no fermentation; for if so, it is worthy the attention of our churches.

Soup and Bread Society.—Two societies of this sort have been recently formed in this city, one of which supplied in eight days 649 families, including 2881 persons, with soup, bread and milk, the latter having only been given where there were children, and in cases of sickness. "The numerous calls upon the charity of the society during its short existence," says the Boston Recorder, "evince an amount of suffering poverty in the city of which very few, comparatively, of our citizens are aware."

All this is well, very well indeed; it should not be otherwise. But how much better would it appear in the great day of account, had the good men concerned in this great public benefaction, been wise enough to prevent its necessity, by those minor acts of charity which, if they had not met the eye of the world, would at least have met the Eye that never slumbers nor sleeps. How much better had our laborers, male and female, been better educated and instructed, better employed, and better paid for their services. Is it so that good men will put off laborers with barely a few cents for making a garment, or a few shillings for toiling all day with the saw, the axe or the hammer, that themselves may live "in style" in the mean time, and grind the faces of the poor still more, by teaching them, through their own example, habits of luxury and extravagance, and then think to atone for it—to the world at least—by forming soup and bread societies?

Let it not be asked what this has to do with health. It has much to do with it. There is the same increased necessity in society for physicians and medicine, as a general fact, as for soup and bread, and from the same causes. Suffering from poverty and disease are yoke fellows. But a word on the subject must suffice.

Medical Warfare.—A war of words is going on in the papers between Alanson Abbe, M. D., who has an Orthopedic Infirmary at Grove Hall, in Roxbury, three or four miles from Boston, and J. B. Brown, M. D., of the Boston Orthopedic Infirmary, in Mount Vernon street. We know little of the real merits of the case, or the claims of either individual, though we have no doubt of the medical skill of both. But when medical men come publicly to call each other liars, it ought in our view to raise a suspicion in regard to their nice moral sense. There is no need of this sort of warfare; indeed the spirit of Christianity would utterly exclude it.

Cancer.—This terrible disease appears to increase in frequency with the progress of civilization. In Paris, in 1830, the number of deaths from this source was 595. In 1840, it was 779, or two and a half per cent of the whole number of deaths in the city. The proportion is probably less with us, but is increasing at a fearful rate.

Poorly Educated Surgeons.—"It appears that of seventeen applicants for commissions (in the U. S. army,) ten only were examined by the army medical board, and two only of the ten approved."—*Bost. Med. & Surg. Journal.*

Precocity.—A boy not yet eleven years old, born at Middleborough, in this state, and lately exhibited at the Boston Museum, is 5 feet 2 inches high, and weighs 265 pounds. He appears to be healthy. A girl also in New York, of only five years of age, has all the attributes of womanhood. She is of a scrofulous habit, and yet seems at present healthy.

Not Dead, but Sleeping.—The editors of the "Health Journal" aver that the paper is still alive, and that they do not like "to be thrown overboard as dead." Now when we looked on the first page of the Independent Magazine, and saw the new title in large capitals, and the words "Health Journal" in small capitals under it, as a mere *sub*-title, we thought it proper to regard the latter as merged in the former. But on the first page of the second number the order is reversed, and Health Journal appears as the principal title. Its readers will consequently have it at their option to believe it was dead, or merely sleeping. In any event, it has risen again.

TEACHER OF HEALTH.

MAY, 1843.

DR. GEORGE BIRKBECK.

We have alluded in a former number,* to the death of Dr. George Birkbeck. Since the insertion of the article which contains the allusions referred to, we have obtained from the London Lancet a more full account of that distinguished individual, from the pen of Dr. Clutterbuck. After speaking in the most unqualified terms of the private character of Dr. B., he adds the following:

"I cannot close this sketch without adverting to his bodily sufferings, which were severe and protracted, though his habits and modes of life were simple and even abstemious—almost, I might say, to an extreme. Yet this was not enough to exempt him from the inroads of disease, and that sometimes of an active and highly inflammatory character. At an early period of our acquaintance I found him suffering greatly from dyspepsia, as it is termed, with a jaundiced state of the skin. These, as was then the fashion, were referred to *a torpid state of the liver*. For this, calomel and the blue pill had been freely administered, on account of their supposed *specific* power in such affections. To these were added *stimulant* and *tonic* remedies. The result, however, was not such as to justify the practice; the disease, altogether, was aggravated rather than relieved. A more minute examination of the different symptoms led us to suspect that the liver, instead of being in a *torpid* state, was in reality suffering from *slow* or *chronic* inflammation. This seemed probable from the dull pain produced by pressure over the region of the liver, and still more from the dry and coated state of the tongue, with other febrile symptoms. Acting upon this presumption, a simple, anti-phlogistic plan of treatment was resorted to, including a few small bleedings from the arm. By perseverance in this course, health was gradually restored.

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* See the October number of the last volume of the Library of Health.

"From this time he continued to enjoy good health till about four years ago, when he suffered severely from catarrh of a highly inflammatory character, and which confined him to his house for several months. It yielded, however, to the anti-phlogistic plan of treatment, and to blood letting. About a year and a half ago, he first complained of an irritable state of the bladder, with enlargement of the prostate gland, attended with the usual distressing symptoms, from which he continued to suffer most acutely, till the powers of life were gradually exhausted. He died Dec. 1, 1841, at the age of 66, retaining the perfect possession of his mental faculties to almost the last moment of his existence.

"The Society* will perhaps indulge me with their attention for a few minutes longer, while I revert to the abstemious habits of our departed friend. This I am induced to do for the purpose of remarking, that a rigid abstinence in regard to either food or drink is not, generally speaking, advisable. It is no argument to say that intoxicating drinks are unnatural, and therefore injurious to the human frame. It should be borne in mind that ours is, in a great degree, *artificial existence*, and that nature supplies us with hardly any thing perfect, or that may not be and is not, in fact, improved by the art of man. We inhabit a climate by no means the best accommodated to our wants, are exposed to various powerful causes of disease, and are without natural means of defence against the inclemencies of the weather. Nature does not even supply us with adequate or proper food, unless herself stimulated by artificial means; there seems, therefore, to be no reason (*a priori* at least) for abstaining altogether from artificial excitement. Experience, indeed, would seem to prove the contrary, and ought to be our chief or only guide in these matters. Experience has sufficiently shown, I think, that the diseases peculiarly incident to cold and variable climates like ours—such, for instance, as pulmonary affections and scrofula in all its variety of forms, (which together constitute the great mass of our prevailing diseases,) are most effectually *prevented* by what is termed a *generous diet*, both with respect to *food and drinks*, with the addition of artificial clothing; while in the treatment of such diseases when they actually take place, the same general principles require to be kept in view.

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* The London Medical Society.

"The value of temperance (another word for moderation) cannot, certainly, be too highly estimated; yet it does not follow that an entire abstinence from animal food or intoxicating liquors is, generally speaking, desirable or useful, in such a climate as the one we live in. On the contrary, observation would lead me to believe that what is usually termed *good living*, (by which should be understood to mean a moderate indulgence in the pleasures of the table,) conduces both to the attainment of vigorous health and the prevention of disease. The body when in health and strength appears to be more steady in its movements and less readily disturbed by external causes, than when debilitated by privation or other means. We may the more readily admit this when we advert to the numerous instances that fall under almost daily observation, of individuals who live to a great age, with an extraordinary exemption from disease, whose habits of life are, nevertheless, far from being temperate."

This doctrine in regard to temperance, Dr. C. calls a *comfortable* doctrine, but not therefore, as he says, to be condemned or repudiated. He admits, too, all this while, that Dr. Birkbeck was "thoroughly imbued with a knowledge of the principles and practice of the medical art, as at present subsisting;—that he was acute in observation, discriminating in judgment, patient and cautious in presenting and administering remedies, and eminently successful in practice;" and says that "had his time and talents been directed *exclusively*, or even *principally* to the study of medicine, he would unquestionably have enlarged the boundaries of the science, and thus have contributed to the extrication of this art from the obscurity in which it is, at present, but too deeply involved.

Now there are not a few somewhat remarkable concessions in these statements of Dr. C. First, that the science of medicine is involved in obscurity. Secondly, that Dr. Birkbeck did not act blindly in his abstinence. Thirdly, that he prolonged his life many years, and greatly diminished his sufferings, by his temperance. Fourthly, that the no-medicine system succeeds as well—certainly in such cases as Dr. B.—in England as in the United States. Fifthly, that our existence is very greatly *artificial*. Sixthly, that in England as well as with us, pulmonary and scrofulous affections constitute the great mass of prevailing diseases.

But there are some statements in which we cannot concur. We do not believe that pulmonary and scrofulous affections are most effectually prevented by what is called a generous diet. The testimony of the majority of the best authorities of modern times, is the reverse. No one, it is true, would recommend a meagre or scanty diet; but rather a light one.

We admit that the body, when in health and strength, is less readily disturbed by external causes than when it is debilitated; but to say or to intimate that abstinence from either spirituous liquors or animal food tends to this debility, is to beg the very question in debate. The friends of a diet exclusively vegetable, as best for the healthy, consider it one of the strongest arguments in their favor, that such diet renders them far more independent of external disturbing causes than any other. It not only promotes health of mind to the last, as Dr. Clutterbuck himself appears to admit, but also health and energy of body.

We have not been able to ascertain *all* the facts in relation to Dr. Birkbeck; but from what we have obtained, we are quite confident with respect to the bearing of the rest. Dr. B. in abstaining like Howard, Newton, Franklin, and many other good men, from exciting food and drink, rendered himself more able to serve that country which did not hesitate to pronounce him one of its greatest benefactors. Dr. B., says his biographer, was long a friend of Popular Education in England, and was the founder of the London Mechanics Institution, of which he was, till his death, the President. "Whenever Dr. B. happened to be among the mechanics of England, he was welcomed as a father and friend; he was highly appreciated by a very large circle of private friends, and was held in great esteem by the most eminent public, literary and scientific men of the day."

Let the enemies of a diet which excludes intoxicating drinks and animal food, make the best they honestly can of the case, for the time is coming, if indeed it has not already arrived, when facts, "plain and unvarnished," will stare them in the face, in such numbers that they will greatly need every thing they can seize of a doubtful nature to sustain them. We would not say this in the way of boasting or triumphing; but rather to prepare the way for the reception of truths which, like those that have come up in relation to spirits and wines, however unpalatable they may be, must ere long be received. Flesh and wine, by a general rule, belong together, in sickness or in health; and must therefore stand or fall—live or die—together.

DOUBTS IN REGARD TO BATHING.

The following communication is written in a spirit of candor that deserves much praise. We rejoice that there are those among us who desire to know the grounds on which opinions and customs rest.

There are some few points in relation to Bathing which have been suggested to my mind from time to time, respecting which I do not recollect of having seen any remarks in print. I have read with pleasure your little work on the subject, but do not recollect as it speaks particularly of the points to which I refer.

My own predilections are greatly in favor of the practice. Yet it is a fact, as you state in your work above mentioned, that it is greatly neglected. Now there is, undoubtedly, a *cause* for this neglect. Either it is considered an injurious practice, or a useless one, or if beneficial, yet attended with so much trouble and inconvenience, as, on the whole, to overbalance the good to be derived from it. It seems probable that all these causes operate in the community to produce the neglect of which I speak. Some are influenced by one, some by another. It seems most plain, it is not generally regarded as indispensable—as a *duty*—as you represent it in your work.

Now, Mr. Editor, I should be exceedingly sorry to use the slightest influence in discouraging a useful practice, especially one which should be regarded in the light of a duty. But I know well that you approve the plan of endeavoring, at least, to clear up all difficulties which may exist in one's mind in relation to any subject which concerns the health, and, consequently, the usefulness and happiness of man.

The difficulties to which I allude, although they have not induced me to abandon the practice, (for I *love* it, and frequently practice it, although not daily, without interruption,) yet have so often come before my mind as to render it proper to *look* at them. Possibly others may have had similar thoughts. Indeed I think probable it is owing, in part at least, to the objections I have heard from others, that my own mind has been directed to the subject in the manner it has.

First, I will refer to the question—Is daily bathing a *natural* practice? That is, have we unquestionable evidence that the God of nature intended that water should be used daily, or very frequently, by application to the *whole* surface, as an aid to enable the skin to perform its functions? It seems difficult to infer this from analogy, founded on the practice of any other part of the animal creation. The practice of birds frequently washing themselves, or of some quadrupeds going into the water on a hot day, does not seem to be in point. It is not contended, however, at least by myself, that such analogy is necessary to establish the fact. From the rapidity with which extraneous substances accumulate on the surface of the skin, it would seem as though copious exhalation could not long be effected, unless nature had made some provision for this purpose. And here the question might arise, whether it is safe to call in art to do nature's work? Whether, if she be called in, nature will not in a measure suspend her operations; and during this partial suspension, a new state of things be effected in the economy of the skin, (if I may use the expression,) which will make it difficult for nature to resume her operations when art, from sickness or accident in the subject, shall be obliged to cease?

This may seem a strange cogitation, yet it may have had its abode in more craniums than one. Being sometime since in a brush store, conversing on the use of the flesh brush, of an improved kind, the individual behind the counter remarked that he did not use one, and suggested the idea, that if a person *commenced* the use, it would be necessary to *continue* it. The thought was new to me, and I was not then prepared, (and am not now,) to prove it entirely erroneous. If the idea be correct, or in part correct, it seems difficult to see why a similar remark may not be true, to some extent, in relation to bathing. One or two other questions might be asked in connection with the above, as, whether any particular harm would result from omitting it for one day or so, during the week, as for instance, on the *Sabbath;* or if one is absent from home, to omit it for a week or so at a time? The answer to these, however, would depend on the answers to the former.

If one were bent on raising objections, he might inquire whether the fact that its most strenuous advocates admitted it could not be practised at more than one or two particular periods during the whole day, was not rather unfavorable to the idea that nature designed to be assisted by its daily or very frequent use? But I will not contend on this point. I am, in fact, so well pleased with the practice, consider it so little trouble, and am so strongly inclined to believe it beneficial, that I am not willing to abandon it, if it can be shown that its use does not create such a *necessity* for its *continuation*, that disastrous consequences would follow its discontinuance on account of sickness or other causes to which all are liable. I say, if this can be shown, I am not willing to abandon it; I do not say that I shall do so, if it *cannot* be shown.

But it may be asked, who ever heard of such objections? Why has not some physician, among the vast multitude who have seen the effects of bathing in all past time, noticed this objection, if indeed it exist? If no one *has* done so, this negative evidence of its futility is by no means to be overlooked; and if physiological evidence can be added to it, so much the better. E.

REPLY TO THE FOREGOING.

It will be obvious at a glance, that whatever may be the weight of our correspondent's arguments, they are applicable to all bathing, whether warm or cold. So that it is not our own practice and views, and our little tract on this subject, that are involved in the question, but the customs and opinions as it were of all ages.

The writer takes for granted the common opinion that man is the creature of nature, as opposed to art, and in order to his health, should be treated as such; whereas nothing, in our view, is better established than that he is in almost all respects already the creature of art. Or rather, he is such a compound of nature and art, that it is no longer possible to tell which is art and which nature.

Yet whatever may be the facts in this view, one thing is certain—that man has innumerable openings on the surface of his body, from which, in the best specimens of healthy bodily condition, a watery liquor, not unlike the serum of the blood, constantly issues. No fact is better proved, than that, as a general rule, internal health ever corresponds, very nearly, with the condition of this transpiration. If this fluid *is constantly passing off in very moderate quantity*, the person is healthy; if it flows in excess or ceases to flow, the health sooner or later suffers.

This being for the present admitted—and we would adduce the proofs were it not that they would greatly extend our remarks—does it not follow inevitably that those habits which keep up, in the best and most permanent manner, the cutaneous transpiration, must be the most conducive to health? And what is better proved than that bathing, in all climates, has this tendency?

True it is, our correspondent fears that if we are in the habit of bathing so that nature depends upon this aid, trouble may arise whenever, as in case of sickness, she suspends her efforts. But would this be a valid argument against the utility of daily exercise, that after being interrupted, as by sickness, nature might find it difficult to resume her operations?

But our correspondent has another difficulty. He has fallen into the common belief that the necessity of persisting in a habit once commenced, is a valid excuse for neglecting to form it. This almost universal opinion is based on another—that the less healthful but more regular play of the human functions, is better for us than more healthful action, when that action must be temporarily interrupted.

We will explain our meaning. It is commonly said to the eater of plain wholesome food, or the consumer of pure air, that if at any time he should be compelled for a single meal or a few meals to eat or breathe that to which he has become unaccustomed, he will materially suffer. In other words, that it is not so well for us to breathe pure air, or eat wholesome food nineteen twentieths of our lives, if we must eat or breathe that which is less healthy the rest of the time, as to use that which is worse, habitually, through life. Does any one believe this to be possible?

"But why then," it may be asked, "do people sometimes suffer so severely from the exchange?" It is on account of the integrity of the system. Under the habitual influence of an unhealthy practice, the crippled system has less power to react; and so continues to hobble on, and call herself—or be called—healthy. While the system which is habitually more healthy, on receiving a bad article, has power to produce a revulsion, and reject it.

So long as we believe, first, that disease is the punishment of physical transgression; secondly, that all mankind, or nearly all, are more or less diseased; and thirdly, that they are *least* diseased, as a general rule, who keep all the organs of the body in healthful and harmonious play, and that they are *most* so, in whom the play of these organs is least perfect, so long shall we be compelled to believe in the usefulness of keeping the skin clean in some way or other. We care not whether the practice of bathing and rubbing be called artificial or natural; for if useful as a whole, art itself becomes nature.

The argument from analogy we reject with our correspondent. We should as soon think of proving the usefulness of salt, as an article of human diet, from the fact that a few wild animals occasionally use it, and a few domestic ones are habitually fond of it, as of proving the utility of cold bathing from the fact that a few birds are addicted to it.

Nor do we claim, as will be seen, that the skin cannot perform its functions without aid; but only that it will perform them better *with* aid. Or rather, that since the skin is crippled by bad artificial arrangements—bad air, neglect of exercise, tight clothing, &c.—the counteracting influences of washing, bathing, friction, &c. become necessary; and not only necessary, but highly useful.

Our correspondent labors under *one mistake*. We have never taught that bathing could not be practised except at one or two particular periods of the day; nor do we know that any other writer or teacher has. There are, indeed, *better* times than others, both for the warm and cold bath; and there are some few circumstances which render both positively objectionable. As a general rule, the cold bath may be taken at any hour of the day, (if a better hour is not equally convenient,) where a reaction can be secured.

One thing must indeed be conceded to the argument of our correspondent. There is such a thing as *so* calling in art to our aid, that the powers of the system become impaired by it. The truth is, that in order to health, nature must do her own work, *up to the healthy line.* Thus, for example, she must manufacture her own heat; and whenever we put on more clothing than is absolutely indispensable, or create a greater degree of artificial warmth by fires, the system is evidently injured. The same might be said of the stomach, intestinal canal, &c.; and of the skin among the rest. Whenever it can be shown that the skin labors less, on account of our ablutions or frictions, we may possibly infer that an injury has been done; but so long as we find those who use the bath to be the more healthy, other things being equal, on account of it, such a conclusion can never be admissible; even though we should not be able to draw the line between nature and art, or say how far man is a creature of mere nature, and how far the child of art and circumstances.

We will only add, that the fact that no writer has brought up these objections of our correspondent before, is no reason why they should not be brought now; and we rejoice that he came to the same conclusion, and sent us so good a letter. If the present reply is not satisfactory—or if information is desired on any other point—we hope to hear farther. Need we repeat, that it is truth which we seek, and truth only? And shall the inquirer after truth shrink from discussion? Shall he not even court it?

TOBACCO AND THE TEETH.

The opinion is extensively prevalent that the use of tobacco, especially in chewing, preserves the teeth. Now though this opinion at first view appears plausible, it is not at all difficult to show its fallacy.

The soundness of the teeth will always bear an exact proportion to the soundness and firmness of the gums, and of the lining membrane of the mouth, stomach, and alimentary canal. But that tobacco makes the gums loose and spongy, and weakens the lining membrane of the whole alimentary canal, is as certain as any fact in physiology. The application of tobacco, therefore, to the inside of the mouth—if this principle be true—instead of preserving the teeth, must hasten their decay.

And so, in point of fact, we find it. The teeth of those who use tobacco are in a less perfect state of preservation than those of other people—I mean those whose habits are no worse in other respects. For there are many other things which injure teeth as well as tobacco; and it would be unfair to compare the tobacco chewer, whose habits are good in all other respects, with those persons who, though they use no tobacco, are yet addicted to gluttony or drunkenness, or have had their teeth spoiled by poisonous medicine.

The teeth of some tobacco chewers, it is true, do not ache; for the tobacco, for a time at least, stupifies the nerves. Nor are there wanting cases, here and there, of old tobacco chewers, whose teeth, so far as they are not worn out, are free from decay. But such instances are about as rare as the so much boasted cases of long-lived intemperance; and prove just about as much in favor of its use, as the latter does in favor of spirit drinking. They simply serve to show that the individuals who thus held out had strong constitutions, with no hereditary tendency to diseases of the alimentary canal or the teeth; and that if *with* tobacco, their teeth were comparatively perfect, they would have been still more so *without* it.

But there is one thing usually observed in those persons who use tobacco, even when the teeth do not really decay. They wear out very fast. Dr. Mussey says he has verified the truth of this statement not only by observations on the mouths of "some scores of individuals in our own communities," but also on the mouths of several individuals belonging to the Seneca and St. Francois tribe of Indians, who, like most of the other North American tribes, are much addicted to the use of this narcotic. I have observed the same thing in the case of tobacco chewers who made their boast of sound teeth and freedom from toothache. I have seen them so worn down—and Dr. Mussey testifies to the same effect—as to project but a little way beyond the gums. In the part of the mouth where the cud is kept, this wearing out or wasting away is more obvious than in other parts.

Dr. Rush mentions a man in Philadelphia who lost all his teeth by smoking; and Dr. Warren, of Boston, testifies that the common belief that tobacco is beneficial to the teeth, is entirely erroneous; but that by its poisoning and relaxing qualities it is positively injurious. And such, it is believed, is the general opinion of medical men, both in this country and in Europe.

But granting the most which can be claimed for tobacco in the way of preserving teeth—grant that it benumbs the nerves, and thus, in many instances, prevents pain—grant even that it occasionally prevents all other decay, except that wearing away at the surface of which I have spoken. Still the general rule is that it weakens the gums and the lining membrane of the mouth and alimentary canal, and in fact of the lungs also; and thus not only prepares the way for various diseases to be mentioned hereafter, but spoils the beauty, injures the soundness, and hastens the decay of these organs. It was no doubt the intention of the Creator that the teeth should last as long as the possessor. Yet in how few of a thousand tobacco chewers, or smokers, or snuff takers is this the result?

HYDROPATHY—THE COLD WATER CURE.

The following somewhat amusing account of hydropathy, the new system of medicine originated by Priessnitz, once a peasant of Silesia, is derived from an English paper, the Kentish Observer. We cannot, however, entirely concur in the writer's denunciations and animadversions on the system at the close, for we believe that though it may contain error, it also contains not a little truth. For the labor of condensing the article into reasonable limits, we are indebted to the Boston Transcript.

An address on Hydropathy has lately been delivered in Dover, England, by a Capt. Claridge, who, from his own sanguine description, seems to imagine that in this new system he has discovered the true elixir of life, for he says he can see no good reason why man should not live to 200 years of age. He brings forward what he terms evidence in favor of longevity through the cold water medium; and he declares that it is impossible for any man to die of any acute disease, while the patient has sufficient strength left to allow of water producing its reaction on him.

Capt. Claridge himself states that he was suffering severely from rheumatism, headache, and weakness of the eyes, for which he had consulted many physicians, and tried various remedies without effect, when he was advised to try the effect of this method. For this purpose he proceeded with his family to Grafenberg, the residence of M. Priessnitz.

The course prescribed by M. Priessnitz for Capt. Claridge was the following:—At about four o'clock in the morning, his servant brought a large coarse blanket, in which he was enveloped, and which was tightly fastened round his neck, and at his feet; then as many blankets as he could conveniently bear were heaped upon him, and on these a bed, so as effectually to exclude the external air; in this state he remained till six o'clock. In about an hour, perspiration took place, when the doors and windows were opened, and he was instructed to drink about a pint of cold water, by means of a pipe. At six o'clock the coverings were removed, and he had his face, chest and shins washed with cold water, to prevent his taking cold. He then descended to the bath in a pair of straw shoes. In the bath he remained three minutes dressed, with all the windows open; and walked, drinking cold water at various places, (to the amount of about eight glasses,) until he arrived at the establishment to breakfast, which was composed of milk, butter, and brown bread, with wild strawberries, for five months in the year. Then he descended the mountain by another path, and on his way took a *douche* bath, in which the stream flowing from the mountain is collected in a pipe. This is suffered to flow first on one part of the body, then another, and lastly on the part affected. From this he proceeded home, took a *sitz* bath—a tub with about six or nine inches of water, in which he sat for fifteen minutes; he then took a foot bath for the same length of time, the servant rubbing his feet while they were in the water. For the weakness of his sight, he lay on the floor upon his back, and placed the back of his head in a basin of water for five minutes. He dined at one o'clock; at three repeated the same process, and walked until nine. For supper he ate the same as at breakfast.

His daughter, who was supposed to be consumptive, but who M. Priessnitz pronounced had merely outgrown her strength, being, as he expressed it, too tall for her breadth, underwent a similar process, except that, to produce perspiration, she was enveloped in a wet sheet, instead of a blanket, and at night she wore a wet cloth upon her chest, and another around her body. In less than three months she was perfectly recovered.

According to the statement of Capt. Claridge, people "never say die," at Grafenberg; or they never decease, as he expressed it, "from any acute disorder." Cold water and a spare diet is the prescription for longevity, and from all accounts, the sovereign panacea "for all the ills which flesh is heir to."

Plain people become *beauties* by the observance of this rule, and the lame are enabled by it to "arise and walk." "One young lady," says the Captain, "who went to Grafenberg with scrofula in her face and neck, so bad as to render her quite an object, in nine months was so completely recovered as to be considered the beauty of the room." Another case was that of an officer who, in consequence of a wound, had his leg so withered, that it was not thicker than his wrist. He shortly had the limb perfectly restored.

The establishment of M. Priessnitz, at Grafenberg, is a very irregular structure, having been built at different periods; but it has one noble room, which is used for meals and assemblies. At the public table, where they seated about three hundred persons, the Captain took occasion to remark the extraordinary flow of spirits which seemed to pervade the company, so different, he says, from what any one would expect in invalids.

There are said to be an hundred establishments on the same plan now in Germany; and the number who have consulted M. Priessnitz from the commencement of his institution in 1829 to 1841, is 7000. This certainly proves the truth of those lines by Foote,

> "Of all the passions that possess mankind,
> The love of novelty rules most the mind."

And also of a line in Shakspeare's Henry VIII.,

> "New customs,
> Though they be never so ridiculous,
> ——————yet are followed."

CHRISTIAN TEA DRINKERS.*

The following fact, says a writer in the Oberlin Evangelist, has lately been communicated to the writer by an aged pious man from New England, who had the statement from the lips of the individual concerned. We commend it, adds the Evangelist, to the candid attention of Christian tea drinkers. We, too, commend it. It is one of those facts which go to confirm the truth of the experiments of Drs. Beddoes, Lettsom and Burdell.

A SHOEMAKER went into Newburyport, Mass., and there commenced business in his line. Being a single man, he took board in a neighboring family. He soon found, to his great dissatisfaction, that his landlady was in the habit of making very weak tea. This was to him an intolerable grievance, for he was wont to drink his tea "as strong as the wax-ends with which he stitched his boots." After bearing as long as flesh and blood *could* bear, in silence, he at last made bold to inform his landlady that he was not suited with her tea; it was too watery.

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* The phrase, "Christian tea drinkers," need not be construed into a reproach on Christianity itself—and yet such a construction may be made by some. We remember what an offence we gave, a few years ago, by heading an article, in the Library of Health, "Wine Drinking Christians." Many very good men could not endure it—probably because they drank wine themselves.

She said nothing. The next morning at breakfast she expressed a hope that her tea would be more to her boarder's liking. As she anticipated, it proved very acceptable. The man, seized by some whim, or whetted by long abstinence, drank *twenty-two cups* before he stopped. When he finished his last cup, his landlady informed him that he had swallowed the essence of a *quarter of a pound* of tea!

The shoemaker went to his bench. At dinner he was missing. He was accordingly sent for, and found stretched on the floor of his shop, senseless, and apparently dead. He was taken to the house, and restorative means were used, which ultimately revived him. It was, however, two weeks before he could resume his business. He never after tasted tea. He was in the habit of telling those who used tea in his presence, that it was a *slow poison.*

We hope the devotee of the cup will not think to escape the force of this fact, by alleging that it was an extreme case. Some few years since the Christian community, throughout the United States, was startled by the announcement that a conspicuous and talented clergyman was found dead drunk in the streets of one of our western cities. Christian wine drinkers very properly took the alarm. It would have been considered a paltry evasion then, to have said that this was an extreme case, and therefore could not be urged against the *moderate* use of intoxicating drinks. The cases are parallel. The two facts illustrate the legitimate tendencies of the two beverages, and consequently point out the duties of Christians to be the same in both cases—viz., to *taste not.*

J. A. T.

OFFENSIVE PERSPIRATION.

Particular parts of the body, says Dunglison, perspire more freely, and sweat more readily, than others. The forehead, arm-pits, groins, hands, feet, &c., exhibit these evidences most frequently; some of these, perhaps, owing to the fluid, when exhaled, not evaporating readily—the contact of air being impeded. It is presumed, likewise, that the sweat has not, every where, the same composition. Its odor certainly varies in different parts of the body. In the arm-pits and feet it is more acid—in the violent sweats accompanying acute rheumatism, this acidity always attracts attention. It differs, too, greatly in individuals, and especially in the races. In the red haired it is said to be unusually strong. By cleanliness, however, the red haired can obviate the unpleasant effects in a great measure, by preventing undue accumulation in the axillæ, groins, &c.; but no ablution can wholly remove the odor of the race. Each race appears to have its characteristic scents; and according to Humboldt, the Peruvian Indian, whose smell is highly developed by education, can distinguish the European, the American Indian, and the African, in the middle of the night, by the sole evidence of this sense.

One advantage of daily cold ablution is more than indicated by this paragraph. We do not mean to say that the warm bath, every other day, for the sake of cleanliness solely, would not answer a better purpose; perhaps it might. But the warm bath is not so likely to be taken, if we urge it, as the cold bath; and to some it is almost inaccessible. Besides, for the general purposes of invigorating the constitution at all seasons, the cold bath is preferable.

We do not wish for the promulgation of sumptuary law, as it is called; for we have little confidence in it. But there is a law on this subject already promulgated; indeed, it has been several thousand years in operation. We allude to the law of love to our neighbor. Now this law requires us to do to our neighbor, as we would have him, in similar circumstances, do to us. But who that suffers continually from an odor which his neighbor has it in his power easily to remove, should not learn to be neighborly; and to see that no cause of complaint exists in his own person? Who that loves his neighbor as he loves himself, will be willing he should endure, unnecessarily, an odor, in some instances not unlike that of the garlic, the woodchuck, or the muskrat, when it is so easily removed, at least partially?

It is sometimes said that the gospel contains the only system of true politeness; and we fully believe it. Take the case before us. The gospel requires us to love one another, *as Christ loved us.* Does any one believe that he who loves his neighbor with this species of love, will "willingly and knowingly" give pain all day long to that neighbor? Will he not be polite enough to do what may be within his power in the way of prevention?

We know of but one possible advantage to be derived from neglect to purify ourselves of this strong and sometimes offensive odor. It is said that it aids the dog most essentially, when lost, in finding his way back to his owner and master. If, therefore, we keep dogs about our premises, and are liable to lose them, it may be well to retain the power of diffusing a scent in the atmosphere that may enable them, at many miles distance, to distinguish and follow us.

There is one thing which in passing over we would just notice. It is the superlative folly of those who for fear they should not be offensive enough, in nature's own filthiness, add to it the filth of other animals in the form of oil, musk, &c. Nor is vegetable or mineral filth, to many people, more tolerable. We know of those who suffer as much from the odor of cologne water, or garlic, as from that of bear's grease, or pomatum, or musk; and there is reason to believe it even more unhealthy.

WATER IN VEGETABLES.

According to the statements of Dr. Playfair, of England, who professes to have analyzed most vegetables used as the food of domestic animals, the following is the average proportions or percentage of water—100 parts of each—together with the organic matters, and the ashes, or residuum.

	Water.	Organic matter.	Ashes.
Turnips,	89	10	1
Red Beet,	89	10	1
Mangel Wurtzel,	89	10	1
White Carrot,	87	12	1
Swedish Turnip,	85	14	1
Potatoe,	72	27	1
Oats,	18	79	3
Wheat Straw,	18	79	3
Hay,	16	76½	7½
Peas,	16	80½	3½
Barley Meal,	15½	82½	2
Bran,	14½	80½	5
Beans,	14	82½	3½
Oatmeal,	9	89	2

From the slightest inspection of this table, it will be seen that a horse in consuming 100 pounds of wheat straw, receives 18 pounds, or about two gallons of water. Of course some allowance must be made for the dryness and other qualities of the substances, but, as we have already said, the foregoing is the average.—So also in eating a bushel of dry oats, the horse receives about three fourths of a gallon of water; and even in eating a bushel of bran, more than *two* quarts.

Again, an individual—man or beast—in eating 12½ pounds of potatoes, receives 9 pounds, or more than a gallon of water. In eating 12½ pounds of turnips, beets, carrots, &c., we receive about 11 pounds of water. Now a person living wholly on these articles of food, at the rate per day allowed to Scotch prisoners, receives in this way alone from two to three quarts of water. Apples contain water in about the same proportion with turnips and beets; and so perhaps of most other fruits; but of these, though much used among us, both for human food and for cattle, Dr. P. does not appear to have made any analysis.

IMPROVED COOKERY.....No. II.—BREAD.

We have spoken of the cooking of eggs in a former number. A more important item in the list of eatables will form the subject of remark for this month—we mean bread, "the staff of life."

First; the grain should be carefully cleaned and washed, and properly ground. The common method of grinding it very fine, greatly impairs its excellence—*takes out the life of the flour*—as some say. How this is accomplished may not be so easy to determine; perhaps by the heat of the millstones. The friction of a rasp greatly diminishes the sweetness of a lump of sugar. Grain should not be mashed finely; but rather cut to pieces: nor should it be cut into pieces very small.

Secondly; the meal should be recent. Few persons have had opportunity, in modern times, to compare the richness of a parcel of meal just ground properly, in a hand mill, with that which had been ground weeks and months before, in the usual way. Those who have observed the difference will hardly be willing to return to the use of flour prepared by job, and half spoiled in preparing.

Thirdly; it should be mixed with pure water, and nothing more; should be left rather dry; and should be baked as soon as mixed. The custom of wetting bread with milk, and of adding something to raise it, is, on many accounts, objectionable. Some of the substances added are positively disgusting; but most if not all of them waste the nutriment, and render what remains of it less wholesome.

Fourthly; loaves of bread should not be too large. They may be large, it is true, but small loaves, or at least thin ones, are sweeter; and the thinner, the greater the sweetness. We do not say thin loaves are *richer* than thick ones, but we do not know that they are less so; while we do say—and every one knows we say truly—that they are more agreeable. Is there any part of the bread so sweet as the crust? Yet the thinner the loaf, other things being equal, the greater the amount of the crust. We knew a person who used to amuse himself by asking bakers whether some method of baking bread could not be invented, by which it could be made *all* crust.

Lastly; bread thus prepared should be subjected to no softening processes afterward—whether by milk, butter, or by soaking or boiling. These processes, we know, are fashionable, but not *therefore* healthy; and he who is wise and healthy, and wishes to remain so, will avoid them.

SEA SICKNESS.

Dickens, in his American Notes, in speaking of the preparation for his voyage to America, has the following remarks:

"I had not inquired among my medical acquaintance whether turtle and cold punch, with hock, Champagne and claret, and all the slight et cetera usually included in an unlimited order for a good dinner, are peculiarly calculated to suffer a sea change, or whether a plain mutton chop, and a glass or two of sherry, would be less likely of conversion into foreign and disconcerting material. My own opinion is, that whether one is discreet or indiscreet in these particulars, on the eve of a sea voyage, is a matter of little consequence; and that to use a common phrase, 'it comes to very much the same thing in the end.'"

We do not insert this passage from Dickens because we regard him as very high authority on this or any other subject, but because we believe it to be a transcript of the general public sentiment on the subject to which it has reference. "People to whom it is natural to be sea sick, will be so, let them eat, drink, or conduct as they may; while others, let them do what they may, will escape;" so almost every one has heard, and so tradition, the practical umpire in nearly every dispute, has always decided.

Yet the decision is wrong, most manifestly so. That some will escape, do what they may, we do not deny; but they are rare instances. So likewise is it true that some will escape downright disease who eat and drink, and exercise and sleep, and otherwise conduct as they please, on land. But their punishment, though long deferred, finally comes, in both cases. Both of them, moreover, are as exceptions to the general rule, which they serve to confirm.

We will not attempt here to explain the philosophy of sea sickness, or think to enter deeply upon a subject of which the wisest know but little. But this we do and will say, that with the mass of those who incline to be sea sick more or less, it makes a prodigious difference what or how they eat and drink, as well as how they exercise, sleep, dress, &c.

1. *Quantity of food and drink.*—In general it is advisable, at first going on board, to be very moderate—we prefer to say abstemious—in regard to quantity of food. Some who are only going a short voyage of one or two days, prefer to fast the whole time. This is not merely safe, but where a person's habits are such that he can do it without losing strength, it is more than safe; it is advisable. As to drink, always use as little as you can without suffering.

2. *Quality.*—In this respect it is desirable to make as little change as possible, unless our habits have been decidedly bad. Never, however, change for the worse. Changes for the better, if changes must be made, are preferable. Yet nothing is more common than changes for the worse, by those who have hitherto, perhaps from necessity, been accustomed to plain living.—Nevertheless it is to be observed that a light and dry diet, especially for those who have been accustomed to it while on land, is, as a general rule, least likely to induce trouble. Besides, should sickness come on in spite of every thing which can be done, it will, in such cases, be more tolerable.

3. *Exercise and air.*—Keep on deck as much as possible, provided the weather or state of your general health does not present a serious objection. If you sleep on deck, avoid a sudden check to the perspiration.

4. *Employment.*—Amuse yourself, and even labor if

you will; but do not read or write much. Any thing which fatigues the eyes will affect the stomach.

If it is asked why we advise to any preventives of sea sickness, since it is so useful to health; we reply, that as a general rule, sea sickness is *not* salutary but *hurtful;* the general belief to the contrary notwithstanding. Or if one in ten or twenty is benefited, at least nine in ten are more or less injured by it, in the end.

DISEASED ANIMALS.

"All living bodies," says Dunglison, "when crowded together, deteriorate the air so much as to render it unfit for the maintenance of the healthy function. If animals be kept crowded together in ill ventilated apartments, they speedily sicken. The horse becomes attacked with *glanders;* fowls with *pep;* and sheep, if they are folded, with a disease peculiar to them." The *swine*, too, he might have added, becomes affected with liver complaint, with measles and hydatids, and the cow with tubercular consumption.

In addition to the general suffering and disease to which our domestic animals are subjected, most of them are made to suffer still more from fattening. Take, for example, the method of fattening fowls in England. This consists in confining them, in a dark place, and cramming them with a paste or pudding made of barley meal, mutton suet, and coarse sugar or molasses mixed with milk. "At the expiration of a fortnight, they are found to be completely *ripe;* but if kept longer, the fever induced by the continued state of repletion, renders them red and unsaleable, and frequently kills them." *

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* Dunglison's Physiology, vol. ii. p. 453

In our own country, a similar course is pursued. Geese are not unfrequently made very fat in eight or nine days; and the cow, ox, sheep and pig, in the same circumstances, that is, in close confinement, in a very little time, especially if they are denied all drink.—But the detail is too horrible. Suffice it to say, that very few of our fattened animals would long survive, by reason of disease, were not this result prevented by the hand of the butcher.

Now will any one suppose, for a moment, that man is uninjured by all this disease? Is the brute injured by the contaminating air of his stable, his crib or his cellar, and does man breathe the same air several times a day when he approaches to feed him, with impunity? Does he drink, with impunity, the water drawn from wells in immediate contiguity with all these, and with the cellar and the vault; and does he eat food cooked in it? Does he, once more, and worst of all, feed upon these masses of putridity and disease, and yet not suffer, nor his children after him? Who can believe it?

Were there no remedy for this, we would not say a word. Did we believe it to be a part of the eternal decree, that man should subsist on sick animals, slain just soon enough to prevent them from dying of their diseases, we would forever hold our peace, despite of the sickness and suffering which prevail as the consequence of this and other errors. But we have not so learned the Divine laws and government. We have not so read the volume of Nature or the Bible. We have not so understood the Divine character.

CHAPTER OF INTELLIGENCE.

Opinions of Porphyry.—This ancient (and, as he is generally regarded, infidel) writer, in a work by Jamblicus, which is still extant, has the following remarks on the effects of flesh meat as a part of our diet, and on the mutual dependence of body and mind:

"The use of flesh by no means conduces to health, but, on the contrary, is rather a hindrance to it; for, by whatever the health is recovered, by the same is it preserved; but it is restored by the sparest diet, and by abstinence from flesh; wherefore by this means also the health is continued.—A tranquil state of the mind and of the thoughts is a great preservative of the health; much bodily vigor has been acquired by this means, as has been abundantly proved by experience. It has been so efficacious, that broken limbs, upon which time and money had been expended for years without a cure, have been healed by a calm trust in the Divinity; from which it is most manifestly evident that the state of the mind is closely connected with the health. A light and spare diet, however, is most intimately connected with the operations of the mind."

Tea and Coffee.—A new and greatly improved edition of our little book on Tea and Coffee is about to make its appearance. The work has been much called for of late, and we hope will be more extensively circulated than before.

In some of the late legislative meetings in Boston on Temperance, Mr. French, of New Bedford, insisted on the necessity of total abstinence from coffee, tea and tobacco, as well as other unnatural excitants; and Dr.

Warren, of Boston, adverted to the danger of substituting these milder excitants for alcohol. We believe the time has fully arrived for laboring to dry up these tributaries to the mighty stream of Intemperance; and greatly rejoice that any are found willing to labor in a cause so unpopular.

Expense of Living.—According to Pres. Humphrey, it is estimated by British writers of high authority, that subsistence on raw produce costs eight pounds sterling, or about forty dollars a year to each individual. Now the soil of Great Britain, not only supports its population of about 18,000,000, but its present produce might, with proper economy—so the most respectable political economists of that country tell us—support double that number. At this rate, the United States, whose territory is fifteen times as large, with a soil as good as that of Britain, might support 560,000,000. But even then the population would not reach its utmost extent, for it is believed that were the whole produce of the soil applied directly to the support of life, instead of incorporating it, as it were, in the flesh of animals, the population, even in the present state of the arts and sciences, might be at least quadrupled. At this rate the United States might sustain a population of more than 2,000,000,000, or one hundred and twenty times its present number.

Now if a more tranquil state of the mind, joined to abstinence from all which offends physically, is as salutary as we believe it to be,—if 2,000,000,000 might now be found on our territory, all healthy and continuing healthy to a century or more, and all wise and good, on the model of Jesus Christ, what encouragement have they who bring good tidings of great joy to man, to be faithful to the end!

The Manikin.—At the last intelligence Dr. Cutter was in Maine, and Messrs. Mack and Lambert were in Connecticut. Both were prosecuting their labors with success. The time has come when anatomy, physiology and hygiene must be taught, or man must cease to be *man.*

Accidents.—A small girl in Cabotville, in this state, lately raised a brass pin or nail, in a fit of coughing, which had been swallowed, as the papers say, two years before. She is now perfectly well.—The pin was never swallowed, of course. It fell into the top of the windpipe, perhaps in the *act* of swallowing, where it remained till it was ejected by coughing.

A child died recently in New York, in consequence of an application to her head of arsenic and whiskey, which somebody had recommended as a cure for an eruption.

Another child died in Walpole, in this state, from inhaling, thoughtlessly, the steam of a tea-kettle.

Henry Gorman died in Chester county, Penn., not long ago of the *glanders*, contracted from a horse he had bled which was affected with the disease. Having a scratch on one finger, the poison was absorbed; and after undergoing severe suffering about three weeks, he expired.

We have known many similar cases; and have always known them more or less severe and dangerous according to the previous bad condition or good health of the solids and fluids of the person thus affected.

Swine at the West.—If it is true, as stated in the papers, not only that a member of the Arkansas legislature obtained leave to go home and kill his hogs, but that 223,987 hogs have been slaughtered in Cincinnati the past year—equal to more than 1200 pounds of pork to each inhabitant of that city—are we to wonder that the people of the west have bilious diseases?

Population of Prussia.—The population of Prussia, between the years 1816 and 1840, increased from about 10,000,000 to about 15,000,000. During the same period there were 13,415,576 births, and 9,552,737 deaths. The increase by emigration, during this period, must therefore have been 724,643. The United States is not the only country in the world which advances in population.

Omission.—We forgot to state in our last, that the editors of the Independent Magazine had requested us to say, that they "*do not* agree with Mr. Owen" in his views of the re-organization of society. We are willing to take them at their word. But there is one coincidence, to speak of no more. At page 59 it is said, and no doubt justly, that "at present, three hundred women, to put the estimate very far below the reality, are employed exclusively in the kitchens of three hundred families, when thirty or forty persons, where proper simplicity is observed in all the relations of food, cookery, &c., would be amply sufficient to provide for the wants of these three hundred families." Mr. Owen says, that in his proposed villages, "the best provisions will be cooked, in the best manner, under arrangements that will enable five or six individuals to prepare provisions for one thousand."

As to our "ignorance" of means which are not "low and partial," "by which labor is to be ennobled, and man to achieve his destiny," let our *works* speak; though not, of course, to *boast.* If, however, there are any better means of accomplishing the noblest *ends*, and "achieving" for man his "*destiny*," than the FAMILY and the CHRISTIAN CHURCH, we shall certainly be glad to have our ignorance on the subject removed.

TEACHER OF HEALTH.

JUNE, 1843.

HEALTH OF THE PUBLIC SENTIMENT.

Every one knows his own difficulties, as every heart knows its own sorrows; nor is it usually either desirable or useful for one to know, in full, the difficulties of another. It is seldom, therefore, that we trouble our readers with any ills of our own, nor would we *ever* do it if they merely concerned ourselves. But we are set "for the rising or falling" of many, and therefore our difficulties become, in a degree, greater or less, the difficulties of others.

Mr. Combe has somewhere said, that it is impossible for us to keep the whole law of God, natural and revealed, in a community which is disobedient and perverse; and his remark contains more of truth than we wish it did.

It is easy for an individual, moved by the love of God and man, to consecrate himself, in private and public, to the service of his heavenly Father. It is easy, we say, for him to resolve on this. But it is not so easy, after all, to execute his resolves.

We have devoted ourselves, for example, many years ago, to the great work of expounding and enforcing the natural and moral laws of God—the natural, it is true, more than the moral, because, though the handmaid of the latter, they are, *as the laws of God*, almost wholly overlooked or neglected. But we cannot do what, from the nature of our resolution, might naturally enough be expected of us. We are impeded, and that on every side; we are restricted even by ourselves.

Our province is writing—not speaking. The public speaker may have his difficulties, but then his difficulties are not ours. Yet it is vain for us to write, unless what we write can meet the public eye, or reach the public ear. Why? Because, in the first place, no *publisher* can be found who is willing to publish what an honest man wishes to say, unless it squares pretty nearly with public opinion. For if, in the second place, he publishes, who will read; but if none will receive or read what he publishes, where is he to get his daily bread?

There ought to be, every where—especially in a city like this—at least one independent paper; a paper which dares to speak what the editor believes to be the truth, without much reference to the feelings or views of others. Yet such a paper exists not, so far as we know, either here or elsewhere. Every press is muzzled. Every editor or author, when about to utter his sentiments, has to ask first, not what is truth, but what his publisher is willing to publish; and every publisher has to ask what people will read.

Against this want of independence we most earnestly protest, not because it is inconvenient to ourselves, but because it represses the spirit of inquiry, and keeps back the tide of human improvement. We long to see here and there a good man, who has capital, go forth in the spirit of the Lord Jesus Christ, and instead of walking about, under present circumstances, to do good, as he did, prepare such books, or edit such periodicals, and such alone, as he conceives the cause of God, and the advancement of the public good demand. But to this end, an independent publisher is also needed; one who is willing to apply his capital to printing and circulating as far as he can, such books or periodicals as he really thinks are needed to move and mould the public mind.

The Rev. Mr. Rogers, of Boston, in his recent lectures to mercantile men, observed, that the main object of Christians, as business men, should not be *to make money*, but *to form character*. Now if this is so—and it is presumed no one will doubt it—the main object of authors, editors, publishers and booksellers, should be to form character. To this end it should not be with them a first principle to prepare and circulate such books as people, with their present bad taste, will buy most readily; but such, rather, as in their own view will be most useful. In doing this, it is true, they may err in judgment, and some of their good be evil spoken of, or be of evil tendency; but even in that case they will have the satisfaction of having done their best. "She hath done what she could," was the highest praise the Saviour could award to one of his female followers.

Grant that little would be effected in this way for a time, considering the present morbid taste and perverted public demand, yet that little is greatly needed. Every thing at present must be diluted, for fear it will offend some fastidious ear, or meet some hyper-critical eye. It must, moreover, be too often hewed and squared to suit party or sect, or it cannot be received; the best men will be offended at it. But if they who love pure truth and health and beauty, and who have capital, instead of spending it to sustain the things that be, and feed the public mind and heart with that which, though pleasant to the taste, is, like the revelator's "little book," bitter in the stomach, would only provide something which presents truth, or at least *thought*, in bold relief, and aims at unmixed good, without partiality and without hypocrisy, would not the public character be slowly but certainly improved? And would not such doers of business deserve and receive the reward of being considered public benefactors?

We know, indeed, that we have no right to claim of others, what we are not willing to do and be ourselves. It is as much a farmer's, or mechanic's, or house-keeper's duty to do business in such a way as to make it a means of forming Christian character, as it is an author's or a bookseller's. Only it becomes those who have more light, to be more careful than others, to have that light shine in a proper manner. Health can never be fully restored to the public body, social, political or religious, till a man may speak out his thoughts on all these great subjects. Yet we repeat it, we know not a paper in this city, which opens its columns to the free presentation and discussion of all subjects; nor an editor, author or publisher, that is not so much afraid of radicalism, or so eager to make money, as to fail of doing all the good he might do, were he wholly independent.

THE LAW OF SYMPATHY.

It is a fundamental law of physiology, that if one part or member of a living body suffers, all the members or parts suffer more or less along with it. St. Paul even alluded to this law in his writings, almost two thousand years ago.

The law is thus expressed by Dr. Dunglison. "The different parts of an inorganic body, enjoy an existence independent of each other; whilst those of the organized are materially dependent. No part can indeed be injured without the mass and the separated portions being more or less affected."

"If we break a branch from a tree," he goes on to say, "the stem itself participates more or less in the injury; the detached branch speedily undergoes striking changes; it withers; becomes shrivelled; and in the case of the succulent vegetable, undergoes decomposition," &c.

"Changes no less impressive occur in the animal when a limb is separated from the body. The parent trunk suffers; the system recoils at the first infliction of injury, but subsequently arouses itself to a reparatory effort, at times with such energy as to destroy its own vitality."

But is it really true, that if we break a branch from a tree the stem participates more or less in the injury? It certainly is so, if the doctrines of physiology are correct. No matter how small the detached portion of the tree may be, if really and truly a living portion of it. The whole remaining portion, even to the trunk itself, is affected by it in a greater or less degree.

The great difficulty to the minds of those who are not familiar with physiology, will undoubtedly be at this point. They will be able to believe, that if an arm is cut or torn from the body, suffering may ensue to the whole system. But how it can be so when only a finger is cut off, especially if removed skilfully by the surgeon, and much more, how all parts of a tree can be injured by the removal of a limb or even a twig, they cannot conceive. And because they cannot understand how or why it is so, not a few reject it.

Now we do not undertake to show *how* it is that this law can be true; for we do not know. We only know it to be a well established scientific fact; and knowing it to be such, we teach it, and point our readers and hearers to the just and natural inferences. We remind them that, in the case of their own frames, no part can be injured without the whole being more or less affected. For it is not the removal of a part alone in which injury consists. The part may be bruised or lacerated, or in some other way crippled, without being wholly removed. No matter how trifling the injury, provided it *be* an injury; the whole system feels it. A swelling of the finger or thumb affects the well-being—yes, *injures,* for such is the law—the whole body; not only the circulating mass, but the solids, even the bones themselves.

If this great fundamental truth could be received—we do not say comprehended, for who comprehends the law of attraction or that of chemical affinity, or that of circulation or growth?—and acted upon, the result would be great and unmixed good to the world of mankind. It is hardly necessary to speak here of the advantages that would result to the rest of the animals, and especially to the world inanimate. It is man alone to whom, for the present, we would direct attention.

If we breathe bad air, even in a single instance, the lungs are more or less affected—crippled—injured. If we over-exert a muscle, that muscle is injured. If we lacerate or over-exert the skin, or neglect the laws of cleanliness, that part of the system is injured. If we receive substances to the stomach which do not naturally belong there—which irritate or cause disturbance, the stomach is injured. All this, no one will hesitate to believe. But when we come to say that breathing bad air, or drinking alcohol, were it but once, not only injures the part or portion of the system to which it is applied, but the whole mass of solids and fluids, belief is staggered; and what we say is, for the most part, rejected. Or if received, it is received in such a manner as to be of no practical use to the possessor.

But is there not a reparatory process? it will be asked. Most certainly there is, for the part itself; we have so stated it in our quotation from Dr. Dunglison. True it is that the process is not always safe; it is sometimes so violent as to produce evil instead of good. Better, therefore, on every account, to prevent any such necessity, by preventing, if we can, the injuries which occasion it.

Besides, it is by no means certain, as we have already intimated, that full reparation is ever made; indeed, the the presumption is far otherwise. Suppose the spine to have been injured, for example, by a bad position. Now if physiology is true, some 250 bones, 400 muscles, and thousands of arteries, veins and nerves, to say nothing of the stomach, the heart, the liver, the glands, the skin, &c. have been injured along with it. Is this remote but certain injury to be, in every instance, fully repaired? And all these parts and organs to be just as well off, for the remainder of life, as if nothing had happened?

It cannot be so; it is not so. To believe it, were downright presumption, not to say blasphemy. What should we say of an architect who should affirm, that a building which had been so injured by violence as to require reparation, in all parts of it, was just as good, or would last just as long as if nothing had happened? Could we have confidence in him? But can we believe of the works of the great Architect, for one moment, what we would not believe of the works of the common mechanic?

Finally, suppose reparation—full and entire reparation—were possible. Suppose that by some means or other, the multiform evils inflicted on the whole frame by our abuses of its parts, could be, by the vital energies of the system directed to this end, entirely removed. Would it not be a waste of those energies? Has not God designed them for a better purpose? Is there not a wide difference between expending our strength in diffusing good, and expending it in combating evil?

Some, we are well aware, suppose that the comparison which has here been made, is incorrect. They say that the system gains strength by this expenditure of vital energy. That as in morals, so in physics, we can only *produce* by a series of failures. But is it truly so, either in moral or physical matters? We do not deny that man "rises by his fall," and should do so. But does he rise the higher for his falls, physical or moral? Is disobedience better than obedience? Is error more useful than truth? Is disease more useful than health? To admit this would be to confound all our notions of right and wrong. Yet is it not practically admitted by such a concession?

We believe the laws of God, in the human frame and out of it, were made to be obeyed; and that obedience is better than disobedience—truth than error—health than disease. We believe not only that if one member suffers, all the members suffer with it, but that the suffering *is* suffering, so far at least as the individual himself is concerned, and not sinister benefit. True it is, and we rejoice at it, that in the wide scheme of the Divine Mind, good is sometimes, perhaps always, "educed" from "seeming evil;" but does it thence follow that more good is educed from the evil or wrong, than would be from the true and the right—and that therefore evil is to be preferred?

DR. FRANCIA.

THERE are a few facts, in connection with the history of Dr. Francia, the late dictator of Paraguay, which deserve the attention of our readers. Dr. F., it will be recollected, died about two years ago, at the age of seventy-eight.

Dr. Francia was at first designed for the church; but disliking theology, he became a lawyer. In this profession he was greatly distinguished, not only for his legal knowledge, but for his shrewdness and his integrity. He always refused to undertake what he considered as an unjust course, and eagerly defended the weak against the strong, and the poor against the rich.

On the death of his father, he inherited a large patrimony, which he did not seem anxious to increase. At this period of his life, he is represented as unsocial in his disposition, passionately fond of study, a libertine, and a gamester. He was also subject to fits of hypochondria, which was a hereditary disease of his family; for his father was remarkable for his eccentricities, and his brother and sister were lunatics.

In 1812, when he was forty-nine years old, he became dictator of his native country, Paraguay, for life. His elevation to this high office wrought a great change in his mode of life—his libertine habits were abandoned, and his moral conduct was marked with even monkish austerity. His mornings were devoted to business; some hours every day passed in study—belleslettres, history, geography and mathematics were the favorite objects of his application. He also paid attention to medicine, which science was at a low ebb in Paraguay at that time. But his particular attention was devoted to military science.

From the time of his elevation to the dictatorship, moreover, we hear no more of his hypochondria; nor do we hear that he ever afterwards suffered from sickness of any sort. He was too busy to be sick; his strong will gave such an energy to the movements not only of the brain, but through the medium of the brain and nerves to all the viscera, especially the heart and stomach, as would insure health, as almost an inevitable result. We do not indeed desire that all mankind should be Francias; but if they were so, the amount of sickness and bodily suffering would be greatly diminished, beyond a doubt.

But it may be interesting to trace the character of this wonderful man a little further. The following description of his personal appearance, is from one who knew him well, having been detained in that country several years by the will of the dictator himself:

"He is a man with regular features, and thin fine dark eyes, which so eminently characterize the creoles of South America. The expression of his countenance was singular, combining shrewdness with distrust. Though at the 62d year of his age, he did not appear to be more than 50. He addressed me at first with studious *hauteur*, but finding me unembarrassed, he soon changed his tone."

The editor of the Boston Mercantile Journal, in a biographical sketch of Dr. Francia, prepared soon after his decease, has the following remarks:

"The most remarkable trait in his policy, was the design of rendering Paraguay independent of the rest of the world; and all his acts, indeed, tended to effect this object. All trade or communication with the adjoining countries was cut off—and neither emigration nor immigration was allowed. This course of policy produced a complete revolution in the whole system of moral economy, which had hitherto been sadly neglected. Agriculture was now the most favorite occupation—the rich soil of Paraguay now teemed with fruits, and various kinds of grain and vegetables—and from the operations of the same cause, the manufacturing industry was actively developed. But the dictator conceived it necessary to quicken the energies, naturally dull, of his subjects, by terror. It is said that he once erected a gibbet, and threatened to hang up a shoemaker, because he blundered sadly in making some military belts—at another time he condemned a smith to hard labor, for having improperly fixed the sight of a cannon. Intelligent foreigners, when they penetrated into Paraguay, attracted by the love of gain or of science, were treated with respect, and in some cases, with favor—but it was difficult for them to quit the country, after they had once put their foot within its borders. The case of Bonpland, the naturalist, who was seized by order of the dictator, at Entre Rios, and afterwards conveyed a prisoner to Santa Martha, is well known to our readers.—His police is described as the most perfect of the kind in the world—one from which the celebrated Fouche might have taken a lesson.

"Francia succeeded fully in the great objects which he early had in view. He destroyed all foreign commerce—he promoted agriculture—he rebuilt the capital, Assumption, and made it a beautiful city—he created and disciplined an army—subdued the Indians on the borders of Paraguay, and secured respect from abroad and tranquillity at home."

We might here speak of the tendency of some portions of this policy to promote health; especially that which promotes agriculture, and checks foreign commerce. But we forbear, and hasten to the conclusion of our brief article concerning him.

He lived, it is said, "in a remarkably simple and frugal manner, having but few attendants, and not indulging in the luxuries of life;" and his habits of this kind he appears to have carried with him through life. He is said also to have been of a generous nature, freely dispensing his treasures, though he was exceedingly economical in the public expenditures. His general knowledge of mankind was wonderful; and so were his energy, perseverance and firmness. No obstacle seemed to discourage him; nor would he suffer any one to dictate to him, or even think for him. His knowledge of mankind and his decision of character—with his great temperance—was the key to his success, and will alone account for his health and longevity.

HEALING WOUNDS.

"ALL animals are capable of repairing their own wounds, when not excessive; and of exciting a sanative power when laboring under disease. If a limb be torn from the body, provided the animal does not die from hemorrhage, a reparatory effort is established; and if the severity of the injury does not induce too much irritation in the system, the wound will gradually fill up, and the skin form over it. To a lesser extent, we see this power exerted in the healing of ordinary wounds, and in cementing broken bones; and although it may answer the purpose of the surgeon to have it supposed that he is possessed of healing salves, &c., he is well aware that the great art, in these cases, is to keep the part entirely at rest, while his salves are applied simply for the purpose of keeping the wound moist, the edges in due apposition, (where such is necessary,) and extraneous bodies from having access to it; his trust being altogether placed in the sanative influence of the instinctive power situated in the injured part, and in every part of the frame."

Had the foregoing paragraph been written by the editor of this journal, the doctrines it advances would have been regarded, by most, as the veriest ultraism. Yet will the reader dare believe it?—their author is Dr. Dunglison; and they may be found at page 491, of Vol. ii. of his Physiology.

Nor are the sentiments advanced wholly new. They are, for the most part, much older than Dr. Dunglison. They are, with a single exception, the very same sentiments which have been taught by the more enlightened physiologists and pathologists, for the greater part of a century.

We have spoken of a single exception to the orthodoxy of the foregoing statements. This is found in the beginning of the paragraph, where Dr. D. asserts that all animals are capable of exciting a sanative power when laboring under disease. If this doctrine has been received by a majority of our medical men, it has been reduced to practice by a few only. It has been, with them, a matter of mere theory—a belief of the head rather than of the heart. Many have gone to work with their patients, just as it may be reasonably supposed they would have done, had they entertained no sort of confidence in the sanative or curative powers of the system. Indeed a few do so to this very hour.

How much of confidence Dr. D. has in the sanative powers of nature during the progress of disease, we do not know. And herein is room for nearly all the difference which is to be observed in our modern medical practice. Some believe more, some less, in the ability of nature to do her own work. Very few believe, practically, that, *as a general rule*, nature will do the whole work; and that the use of medicine, of every sort, vegetable or mineral, allopathic or homœopathic, externally or internally applied, *is only the exception.* This, however, we are quite sure, is the doctrine to which all intelligent medical men will sooner or later come. When we say this, however, we speak of the *profession*, rather than of individuals. We do not forget that no medical man over forty years of age, ever received Harvey's great doctrine of the circulation of the blood, though all came to admit it within two centuries afterward.

As to the efficacy of external applications to wounds, we hardly know a physician or surgeon of common sense, who would hesitate to subscribe to the sentiment of Dr. D. *in toto.* All know, if they know any thing worth knowing in their profession, that salves have no efficacy beyond what is here ascribed to them. Nor do they keep the public mind in ignorance, as a general rule, from a mere wish, or perhaps from unwillingness to have men remain enveloped in ignorance, but because they do not know how to scatter light without doing more harm with it than good. It is to little purpose that we remove the cataract from an eye, if the owner is to expose it at once to the full blaze of a noonday sun, despite of all advice to accustom it to the light gradually. It is to little purpose that we attempt to enlighten those who love darkness rather than light, and who will persist in walking in darkness till they actually stumble and fall; and even then seek for a guide merely to be placed on their feet, and not to be taught how to walk in time to come.

We do not mean to compare the surgery of common wounds with that of eyes; by no means. All we mean to do, is to apply the same principle to both cases, and to all. Men are no more disposed to study the laws of the living system, as a means of preventing one evil than another. All they care for is to get well when they are wounded or sick; they care not how or by what processes, provided they are such as do not interfere with the gratification of their appetites, or draw heavily upon their purses.

The most that an honest and intelligent medical man can do, as a general thing, is to keep others from doing mischief. Patients as well as physicians, have been in the habit, time immemorial, of looking away from nature, to external means of restoration; and therefore the first question when any thing ails them is, what they ought to do. To be told to do nothing; that the great business is *to refrain from doing*, is to them like Greek and Latin and Arabic. And he who should gravely tell them the whole truth on the subject of wounds or diseases—that as a general rule they should be left wholly to nature—and should govern himself and his conduct with reference to this great principle, would be thought a fool; and might expect either to see his place supplied by another practitioner, or what is still worse, to have his patient come under the influence of all the meddling individuals—male or female—in the neighborhood, every one of whom would have his supposed *certain cures*, in the efficacy of which his own confidence would ever be in exact proportion to his ignorance of the laws of health and disease.

This single principle, that nature generally does the work of restoration, whether in the case of wounds or diseases, and that the great business of the medical man, in the present state of things, is to keep away all foreign interference, *could* it be once deeply infixed in the public mind, would do more to hasten the day of human emancipation from the bondage of empiricism, than has ever been done without it in a whole century. For the common belief has been that there must be medicine used, and that this was the prominent agent of recovery. Whereas the true belief, that medicine must not be used, or if *occasionally* necessary, is only a sort of assistant, and not a very conspicuous personage, would reduce our ten thousand apothecaries' shops to scores or hundreds; it would make our pills, powders, drops, bitters, sanatives and panaceas, occupy a very inconsiderable place in men's minds, and if medical men, licensed or unlicensed, should not conform to the existing state of things, would greatly diminish their present numbers. However, it is to be hoped—it is indeed believed—that along with the establishment of such a principle, would come so strong a demand for information on the subject of health, as a means of preventing disease, that an army of men much larger than our present army of medical men, would be needed to teach anatomy, physiology and hygiene. We should not, it is true, want so many pill boxes, or bitter bottles, or ointment jars, as now. When men believe that we might as well think of drawing a nail from a tree, or cleanse a knot hole, or detach a decayed portion, by the application of plasters, unguents or lotions—even the all prevailing alcoholic lotion—a great change will exist in society, and a current will begin to set towards better, and more glorious, and more enduring things.

A WORD ON DRINKS.

The best drink beyond all possible debate, is pure water. And yet there are those to whom this statement does not convey the exact truth. Of this we might present a hundred illustrations; but a single one must suffice for the present.

In the front ranks of the Washingtonians, in a neighboring town, was a respectable mechanic, whose habit it long had been, to swallow as drink, several quarts of liquid—coffee, tea, beer, cider, milk, &c.—every twenty-four hours. Of distilled spirits, or even the stronger wines and beers, he seldom indeed tasted; but he tasted still more rarely, of simple pure water.

But as we have already intimated, the cold water army was on its march, and our mechanic enlisted. All for a time went on well. After a few months, however, he was taken ill of a bowel complaint, and suffered severely. Indeed, it turned out that there had been a debility of the bowels gradually increasing for some time. He recovered, but not till many weeks of suffering had elapsed.

Now the truth of the case was about the following. He had long been accustomed, as we have seen, to exciting drinks, in considerable quantity; and his disease was caused by drinking a similar quantity *without* the excitement. Had he drank far less at first, and accustomed his stomach to the presence of an unstimulating fluid gradually, he would probably have escaped his sickness.

There is one thing more which is necessary, or at least desirable, in making the change from exciting drinks to simple water. It is that we should relish what we receive from time to time during our transition. Nothing either solid or fluid sits so well, or is so healthfully disposed of, when it is unpalatable. Few people, if indeed any, who have never drank cold water, have any relish for it.

But how shall we relish what we do *not* relish ? it will perhaps be asked. We might reply by asking another question—how we came to relish that which we *now* relish, but which a few years ago, we *did not ?* Is the change a matter of mere chance ? Have there been no agencies at work in this matter ? Or if so, are these agencies or causes, of such a nature as wholly to elude our discovery ?

We do not believe there is any mystery about the matter. There are two ways of bringing ourselves to relish what is now disagreeable. 1. By what is called accident. 2. By voluntary effort.

1. By accident we mean some association of circumstances which was not designed to subserve that particular purpose. Thus an article of food which before was disagreeable, is presented to us in *good company*, and in very small quantity, and we bear it, for the company's sake. Again we meet it in similar circumstances; and ere long again ; till at last we come to be reconciled, and more than reconciled to it.

2. Any one who understands at all the law of association already alluded to, may imitate by voluntary effort what, in the former case, was purely accidental. If, as Addison says, any one may bring himself gradually to like or dislike what he pleases, so far as moral and intellectual preferences are concerned, it must be strange in-

deed if it were not so of physical matters. And what it would seem before hand should be the fact, we find from observation, often from reflection, is so. We can unquestionably, in due time, bring ourselves to like or dislike what food or drink we please.

It is not to be denied, that there are circumstances or habits, which greatly expedite such changes. Thus, he who uses none but plain food, will bring himself to relish new dishes, or new drinks, which he knows to be best for him, however insipid they may at first appear to be, much more readily than he who has been, all his life long, in the use of complicated or exciting things or substances.

"Those," says Tissot, "who return to a simple diet on account of their health, although with some disgust, may rest assured that they will find, in this food, pleasures which they did not expect. A correct ear distinguishes a slight difference between two tones, which escapes a less sensible ear. The same is true with the nerves of the organ of taste; when delicate, they perceive the slightest variety in tastes, and are sensible to them. Among those who drink water, are some to whom it is as pleasant as the choicest wine."

It would be strange indeed, if the Author of nature, who made both water and the stomach, and adapted them to each other, (and who indeed made no other fluid adapted to quench thirst,) had so constituted a part of the stomachs in the world that they could never drink pure water. We may be assured that to healthy stomachs, pure water is not only the pleasantest drink, but the most salutary in its effect on the stomach and the rest of the first passages.

SNAILS AND SNAIL POISONING.

According to a French Medical Gazette, a family of peasants in Clermont, France, was recently poisoned by eating snails. It is not common, says the Gazette, to witness such terrible results, but "it is quite common to see, among peasants, indisposition caused by snails, which comes from their eating them as soon as gathered." The snails, it seems, had fed on poisonous vegetables, among which were the coriatia myrtifolia. The symptoms of disease, in the unhappy peasants, were like those induced by stramonium, wolf's bane, henbane, &c.

The writer in the Gazette suggests, by way of caution, that the example of the ancient Romans should be followed, and these animals should not be brought to the table until they have been kept six months or a year, feeding them on bran and wild thyme. "This is the way, also," he adds, "to make them fatter, and more savory."

True it is, that the custom of eating snails does not yet prevail among us; for oysters, clams, lobsters, muscles, eels and frogs are abundant. But as our population becomes more and more dense, we know not why snails, locusts, (or at least grasshoppers,) snakes, grubs, &c., should not be introduced. Snails, however, are best and safest of all.

We have on hand an article in favor of eating snails, written in the days of our boyhood, which, perchance, may amuse our readers. Those individuals who enviously complain that we borrow the ideas of our neighbors, may here find at least *one* original article; for it was prepared before any noise had been made about *health* among us, either in the papers or by lectures.

EATING SNAILS.

"We have authentic accounts of tribes of men, who, for a greater or less proportion of their diet, use snails. We

turn from such accounts with disgust; but wherefore? Chiefly because it is different from what we have been accustomed to see; rather than from any thing naturally irrational in the practice. For we are all ready to admit that animal jellies are among the most dainty dishes in the world; and they are certainly very nutritious. Now the snail is little more or less than a mass of animal jelly, or *gelatine.* And as to any objection to using it for food on account of its native ugliness, it is at least as beautiful as the tortoise or the oyster.

"The objection that the snail is a filthy animal, is not true. On the contrary, it is a very cleanly animal—no dirt ever adhering to it while in health. Its person, food and habitation manifest the strictest regard to cleanliness. That it ought not to be eaten alive, as is often done, will be true, when it shall be proved that we ought not to eat clams, oysters, muscles, scallops, lobsters, &c., alive: and any objection to eating the animal whole, may be disposed of in the same manner.

"So far am I from feeling any contempt for those among our race who eat snails, that I feel a respect for their wisdom. They eat them because Providence has thrown them in their way, and they find from experience that they are nutritive and wholesome. Would it not even be for the interest of mankind to cultivate the various species of these animals on purpose for food? Perhaps they might supplant the use of sea-shell fish, for those who do not live immediately contiguous to the salt water. And if they are not so savory, they are more nutritious. They *might*, however, be made savory, by *a proper mixture of condiments;* or if not, habit would undoubtedly reconcile people to their use.

"Whether these suggestions are just, I submit to the sober and judicious part of the community to determine. The All-wise Creator seems to have placed shell fish chiefly on barren shores, as if to serve for a support to those who cannot live by agriculture. Is it not then a manifest wrong for people who live in other parts of the country, to devote them to their own use? If those persons who live thirty, fifty or *five hundred* miles in the interior of a country abounding with the greatest profusion of animal and vegetable productions, seize on the shell fish of a barren coast, and convert them to their own use, ought they not to give us, in return, some of their own commodities?

"It will be said, perhaps, that in some cases the lands adjacent to the beaches where shell fish abound, are not inhabited much: that, therefore, in seizing on the shell fish, we injure nobody. Just so the inheritor of a large tract of fertile but uncultivated land in the midst of a country over-stocked with inhabitants might reason, when urged that by holding so large a tract of land he did a wrong to his poor neighbors. They have not been in the habit of placing any dependence on it, he would say, and therefore do not expect it.

"Now I maintain that we ought either to let alone shell fish, when we live remotely from them, or else give a portion of our own productions in return. But would it be good economy to travel thirty miles and back several times a year, at great expense, and after spending a day or two to catch a dollar's worth of clams, pay for them into the bargain? But the pleasure, you will say, which we receive, is in part payment for our toil. Would it afford less pleasure, to expend the same amount of time and money in visiting our country's curiosities, natural and artificial, and drawing our children's attention through nature up to nature's God? And which would be most apt to form our children to habits of economy, mercy, liberality, *rationality?* Which most likely to counteract the lessons of prodigality, cruelty and vulgarity, to which they are constantly led by the corrupt example of a corrupt world?

"But mankind have an almost universal propensity to something that comes from the sea; it will be said. I grant that the propensity is acquired by children in some communities, till it becomes habit—*second* nature—but I deny any other native propensity to shell fish. We may certainly save our *money*, *time*, *character*, *health*, *happiness*, &c., by raising beds of snails, and training our children to eat them.

"Wolcott, Conn., March, 1829."

HEAVY EYELIDS.

Heavy eyelids, whenever or wherever they appear, like dark and heavy clouds, are more or less ominous. In man, woman or child, they indicate disease, or what is more accordant with the real state of the case, they *are* disease. No perfectly healthy person has swelled or heavy eyelids.

Such an assertion may be startling to many. Why, what is more common among us, they will say, than swollen or heavy eyelids? Do not many persons have them who are perfectly healthy? Indeed, does not almost every body have them, at one time or another? Are they not often induced by mere over sleeping?

It makes little difference how they are induced, or how frequently. If every body had them, on rising in the morning, it would not alter the case. They would still indicate disease.

But it will be asked, what will you say of fleshy people? Do they not often have heavy eyelids? Is the accumulation of fat in the cellular tissue, in such cases, to be regarded as disease?

We answer, in the first place, by a denial of what is here affirmed, that the cellular tissue of the eyelid contains any fat. On this point we have the authority of a writer no less respectable than Dunglison. "The cellular tissue," says he, "beneath the skin, is very loose, and is, under particular circumstances, infiltrated by a serous fluid, giving the eyelid, especially the lower, a dark appearance; but it never contains fat."

That corpulent people often have heavy eyelids, is undoubtedly true, but it does not thence follow that they do not indicate disease, even in them. We have seen that the enlargement is not fat; but a serous or watery fluid. But we should also know that fleshiness or corpulence is disease; it is therefore to be expected that the eyes should be diseased with the rest of the system. But beyond this nothing is more common than for corpulent people to be addicted to those habits which, independent of their fleshiness, would be likely to produce the serous effusion of which we have spoken.

It is time, however, to enumerate some of the causes of heavy eyelids, that they may be avoided by those who choose to avoid them.

1. *Intemperance.*—By intemperance we here mean the abuse of any or all of the three appetites. That excess in the use of intoxicating drinks will produce heavy eyes, is, we believe, generally known; but it may not be known to every one, that abuse of the stomach, or of the generative system, will have a similar effect. Yet so it certainly is. Many a licentious young man is known as such by his eyes, who probably supposes himself hid to all eyes but that which never sleeps nor slumbers; perhaps even to that.

2. *Dosing and Drugging.*—Many drugs and medicines supposed to be harmless, have the same effect. Those are worst, however, which are most poisonous.

3. *Indolence.* This may produce the effect in question

by the debility it induces. But be the *modus operandi* what it may, the indolent often have heavy eyes.

4. *Excess in Sleep.*—This we have mentioned. The effect is greatly aggravated when sleep is preceded by heavy suppers, or when we sit up late, and sleep late.

5. *Straining the Eyes by Reading.*—Many read late at night, and under other improper circumstances. Such a course, followed by too much sleep, and by late hours in the morning, is almost sure to affect the eyes in various ways; but in none more certainly, than by rendering them heavy and swollen.

6. *Excess of Heat.*—This, whether applied in our rooms, our feather beds, or our drinks, is admirably calculated to produce suffusion of the eyelids.—It is, however, no uncommon thing to find several, sometimes all, these numerous causes united.

EVILS OF PROFUSE SWEATING.

In Fuller's "Medicina Gymnastica," a work published in London one hundred and forty years ago, we find the following sentiment, under the head, "Of being exercised to bear cold."

"If men knew how much sweat impairs the skin, and inclines it to wrinkle, as Sanctorius tells us in one of his aphorisms, they would be fully persuaded that Nature can make her discharges by finer and better ways than those which are so perceptible, and that flannel is scarce necessary or convenient on this side old age.

"The nervous parts of the skin have certainly a very great elasticity, and are capable of being strengthened by good and suitable management, even to a habit, as well as those of other parts; and we see that where the glands of the skin do throw out a very sensible quantity of sweat in some particular parts, these parts grow accustomed to the air or other moisture, and receive little or no hindrance in their discharges from it, as we see the palms of the hands shall sweat copiously notwithstanding the external air immediately striking upon them; and none are more strong and healthy than those who are wont to have their feet wet without changing their shoes and stockings for it.

"The stomach, placed in the midst of the body, and consequently exquisitely warm, is adapted to bear large draughts of the coldest liquor without the least damage, unless the body has been externally heated; and though its office seems to require great and continual heat, yet it is not obstructed in it by the admission of cold things; nor are its glands benumbed or constringed so as to hinder the secretion of digesting juices; and can we suppose the fabric of the skin less perfect and exquisite, when, by its position, it is to be immediately subject to the effects of the external air? Can we think its vessels are not endued with a strength sufficient to answer the force and weight of the incumbent air; and its glands of such a make, as that the fine particles they strain shall be of so fine a texture as to pass the skin, when it seems to us too close to permit any transition?

"The inhabitants of this nation formerly went naked, and were more healthy than we are now; and the people (savages) of Canada, and all the cold continent behind Newfoundland, go much after the same manner, without any inconvenience from it, but are rather fortified against the accidents they would be subject to, if their pores were too much opened and relaxed by too much warmth; and we may very well distinguish the rational from the savage part by as thin a habit as decency will permit. It is a strange thing that people should be fond of suppling their skins, and keeping their pores too open, as if a man did not really perspire when there is no sensible moisture upon the skin, though not so much as when he is all bedewed with exhalations, which should not be sent out in so great quantity but upon brisk exercise.

"Besides, we may argue from the effects of too much heat, and from the distempers of hot countries—to instance but in one disease, and that is the colic. I do not doubt but many a one among us has brought an accidental colic to be habitual; for being scared by the first fit, they have endeavored to secure themselves from another by those very means which prove most likely to bring it on. If any one thinks this strange, let him remember what happened when muffs were worn universally. Some men were wont to let them hang upon the bowels for the most part; and I have heard a healthy man complain that upon leaving off his muff for a day or two after such a custom, he has been griped; from which any one in the world will infer that the keeping the part too warm prepared it for the ill effect of the air, and that the same may happen in any part of the whole body. So that it is a folly for people to nurse up a distemper which was at first, perhaps in great part, owing to a tender way of living, and by continuing that course of life must be rather increased than perfectly rooted out."

IMPROVED COOKERY.....No. III.—THE APPLE.

For the healthy, who have been trained to use fruits in their natural state, we are far from being disposed to recommend any method of cookery at all. Better to use them in the way to which they have long been accustomed. Nevertheless, to those who cannot eat raw fruit, the following suggestions may not be wholly useless.

The apple is usually cooked too much and too long. There is a strange notion abroad, that the pulp of this fruit contains a great deal of air, and that this air ought to be expelled. Now there is no more air in an apple, than in a piece of bread so large, or a piece of flesh meat. When an apple is being baked or roasted, the air within it becomes rarified by the heat, but cannot escape on account of the firmness and density of the skin. The tendency of the air to expand increases, till at length it overcomes the resistance, and the air escapes through the opening. When the cuticle or skin which covers grain, or fruit, or corn, or buckwheat, or chestnuts, is broken, the air escapes with considerable noise; and the contents being expanded and thrown out, the grain or nut is said to be parched.

Now it is a hasty observation of these phenomena of *parching* and *bursting*, that has, as we suppose, led to the mistake above alluded to. The apple and the chestnut have been said to be windy; and long boiling, baking or roasting has been supposed necessary to drive out the wind. Especially is this true in the case of the apple.

Long cooking, it is true—long baking, at any rate—evaporates the water of the apple, and renders what remains of the pulp rather more nutritious in proportion to its quantity. But unless great care is taken to cook it very slowly, and at a temperature somewhat low, the other properties of the fruit are apt to escape, and a loss is sustained which cannot be repaired.

There is a method of preparing the apple, which while it secures every important and valuable end of cookery, does not involve a waste of nutriment. This method or process consists in heating it slowly till the whole mass becomes soft, but does not burst. In this way the original proportions of the fruit seem scarcely if at all altered; even its plumpness is hardly diminished. There is such a thing, in fact, as softening an apple throughout, while its very color internally remains unchanged.

The advantages of this slow and, as some will call it, slight method of cooking the apple are, first, that we preserve its beauty; second, its natural taste; third, its natural properties; fourth, we greatly simplify. Many, it is true, will not regard simplicity in cooking as at all important. The more complicated a dish is, with such persons, and the more remote their culinary processes are from those of the Great Former of the substances themselves, the better.

MEDICINE AND MEDICAL SCHOOLS.

Few things seem to us to give greater promise of good to our country, than the efforts which are made by its medical schools. These are not merely becoming numerous, but—what is of much more consequence—respectable.

We have examined, from year to year, with deep interest, the catalogues, circulars, &c., of these schools. A circular recently issued by the Medical Department of the Columbian College, at Washington, D. C. has been received, which contains the following facts:

" The Medical College is three stories high, with a spacious, well lighted and well warmed lecture room in *each* story; thus allowing the students to change the rooms at the close of each lecture, and avoid the tedium of a long confinement to the same seats. Besides the regular lecture halls, and various small rooms for apparatus, anatomical museum, private apartments for the professors, &c., there is a capacious, well ventilated dissecting room, thoroughly lighted and warmed, and where, at a very moderate expense, dissections are carried on during the session, under the immediate and constant superintendence of the demonstrator, *and with the most abundant supply of material.*

"In addition to Thibert's celebrated pathological models, &c., drawings, preparations, and apparatus for obstetrical illustrations, a complete chemical and philosophical apparatus, specimens of materia medica, an extensive and valuable collection of drawings, models and preparations relating to anatomy, as well as an ample and choice collection of surgical instruments, important preparations are now in progress which will materially enhance the facilities the Faculty already possess of illustrating these lectures.

"The professor of Pathology and Practice (Dr. Sewall) is about to embark for Europe, to visit the medical institutions of England, Scotland, Ireland and France, for the purpose of procuring pathological specimens, models, drawings, instruments, apparatus, or whatever else may be of use to the different departments of the school.

Such efforts to make a school useful—especially a school at the seat of the national government—are as important as they are praise-worthy. There never was a time when enlightened and philanthropic medical men were more needed, at least in the United States, than at the present moment. Not to drug the people, (for they have already drugged themselves almost to death,) but to prevent disease by their efforts, where prevention can be brought to bear; and where it cannot, to do what can most effectually be done in the way of cure.

That for ourselves, we have little confidence in medicine, and in medical skill even, in the case of actual disease, is probably well known to most of our readers. But what then? Shall we therefore rail at the medical profession? It is not the most scientific men who rely most on medicine, and deluge the world most with it, but the contrary. Show us a truly wise medical man, and he has very little to do with powders and pills, and drops and plasters. He is outdone in this respect by every petty apothecary; we had almost said, by every nurse and mother. Let not then the mistake be made, that to elevate the medical profession, is to encourage dosing and drugging; for the reverse would be the consequence. We look for medical reform chiefly to medical men; if it comes not from this source, the world must remain in the error and darkness of quackery.

SUPPERS.

The Alcantes, says Tissot, who were famous for never tasting animal food, and never ate any thing which ever had life, were famous for the tranquillity of their sleep, and were ignorant of dreams.

Lewis, a writer on this subject, prohibits animal food at supper. He recommends that nothing more should be used, than some slices of bread and a very little milk.

Boerhaave recommended a dry supper, chiefly or wholly vegetable.

Nothing, says Tissot, contributes more to a calm and constant sleep, than a light supper.

One rule of Hippocrates was, never to retire to rest with a full stomach.

Indeed, there is hardly a writer to be found on this subject, who has not recommended a light supper; and some recommend one which is not only light, but dry. Yet throughout the civilized world, mankind prefer, with few exceptions, precisely the reverse of all this; and appear to think their constitutions make the demand. Or if they do not fully believe the heavy or liquid supper demanded, they do not see that it does them any harm. Our farmers who do not eat flesh meat, think themselves quite abstemious when they satisfy themselves with a quart or so of bread or pudding and milk ; and the citizen who is not enough fatigued or hungry, to take heavy or indigestable food at six, can bear it he thinks at nine. Yet, we repeat it, all plead the testimony of their own experience in favor of the practice, their dreams, acid stomachs, headaches, dyspepsias, liver complaints, &c., to the contrary notwithstanding.

CHAPTER OF INTELLIGENCE.

Poisoned Grain.—The following article is extracted from a letter written from Chester, Pa., under date of March 1st, to a gentleman in Philadelphia.

"The schooner Linnet, of Plymouth, Mass., loaded with oats and corn, having been cut through by ice, and being a few hours sunk on the upper point of Reedy Island, sold some of the oats to persons in this neighborhood, while lying at our piers. Almost all the horses that ate of these oats have died, as well as one hog and some chickens. The corn, no doubt, will be sold in your city, and it may be impregnated with the same poisonous substance. A physician of our town has some of the oats under process, to ascertain what the poison is."

We have not heard the result of a chemical investigation, by the scientific gentleman alluded to; but if no discovery were to be made in such a case, the fact of the poisoning would remain. We have known some scores of men poisoned by eating part of a cheese ; but the most skilful chemist could detect nothing.

Physiology in Common Schools.—No less than 124 pages in 142 of the Sixth Report of the Secretary of the Massachusetts Board of Education, or more than five sixths of the whole, are devoted to the work of endeavoring to prove that Human Physiology *must* be taught in all our common schools!

House I Live In.—This little work, designed as a stepping stone to higher works, has been used in several schools among us during the past winter; and has received the approbation of teachers, pupils and school committees. The next edition will be prepared with a special reference to this end. It is published by D. S. King & Co. Boston.

A Long-lived Family.—John Shepard, of Foxboro', in this state, who died some thirty years ago at the great age of 109, had three daughters, whose average term of life was extended to about 90 years. One of them, whom we have mentioned in a former volume as refraining almost wholly from animal food, using no tea or coffee, and expressing great surprise that any body else could be fond of them, lived to the age of 97.

Mental Hygiene.—Dr. Sweetser, the author of several valuable works on health, has recently written a volume of 270 pages, entitled, "Mental Hygiene, or an examination of the Intellect and Passions, designed to illustrate their influence on health and the duration of life." From a hasty examination of the work, we think highly of its contents. It is published by J. & H. G. Langley of New-York.

TEACHER OF HEALTH.

JULY, 1843.

THE LAW OF SYMPATHY.

We have already bestowed some attention on the law of sympathy; but its importance is such that it deserves much more than a mere passing notice. There are two kinds of sympathy, natural or *healthy*, and morbid or *diseased*. Our remarks in this article will have more or less reference to both.

It very often happens, that owing to an impression made upon one organ or part, other distant organs or parts become affected, without our being able to explain the nature of the connection by any known mechanical principles, or by any law of association. A particle of snuff, for example, applied to the membrane of the nose, produces an itching sensation, which is immediately followed by a powerful effort of the whole respiratory apparatus. There is no way of explaining such a phenomenon except by referring it to the law of physical sympathy. Nor does this explain it, in truth; it only gives us a name for facts or phenomena which are frequent in the living domain, but which are, in themselves, after all, inexplicable.

Some knowledge of these sympathies is indispensable to all; though to none more so than to mothers. Thus, itching at the nose, and sores at or near the angles of the mouth, almost always indicate irritation, greater or less, of the lining or mucous membrane of the alimentary canal; especially in the region of the stomach and the small intestines. It may be caused by indigestible food, or by worms. Did mothers know this, they would less frequently apply ointments to cure eruptions, which, instead of doing harm, probably do good, for the time, by diverting or drawing off disease from the internal organs, and locating it on parts more superficial, where its effects will be far less injurious.

Did mothers understand this subject rightly, moreover, they would never be in such haste as many now are to heal the surface of punctured wounds. Suppose the foot has been penetrated deeply with a nail. How many are gratified to have the wound heal rapidly. Yet owing to the mysterious, wondrous sympathies of the system, it sometimes happens that superficial healing only aggravates a coming lockjaw. It is safer in such cases to keep the surface open as long as possible. Wounds are healed, when they heal rightly, from the bottom, and not from the top. The mistake here is in supposing that they are cured by our appliances; when it is the powers of nature within that do the work, if properly done.

There is a strong prejudice with mothers, also, in favor of demulcents in cases of bronchial or lung irritation. If a child has a cough or sore throat, he must take flax-seed tea, or tea of slippery elm, or animal or vegetable oils; and their efficacy is supposed by many to be proportioned to the quantity taken. Now a little knowledge of the law of sympathy—one would think of the laws of anatomy and physiology even—would lead to very different conclusions. The disease in these cases is in the lungs, or in the windpipe which leads to them, and not in the esophagus or food pipe. Substances, therefore, which are swallowed, pass at once beyond the region of disease. The relief afforded by them, as a general fact, is obtained solely in consequence of the little which adheres in passing over the top of the windpipe or door to the lungs. There is an advantage in soothing these parts by occasionally using substances which are of a mucilaginous or oily nature; but not in swallowing them. In truth, except in case of high fever, where a necessity exists of conveying the mucilage into the system, generally, they do positive harm, by loading the stomach, when it ought to be kept as free from load or oppression as possible.

The reason for smearing the top of the windpipe, in these cases, is, that there is a powerful sympathy between this extremity of the tube, and the deep seated parts to which it leads; what therefore soothes the first by allaying its irritation, diminishes the irritation within.—We have seen diseases made worse more than once, by pouring down large quantities of a strange compound made by mixing molasses, butter or lard, and vinegar, as well as by large quantities of skunk's oil, and other nauseous, heavy, indigestible substances. In fact, many a cold has, in this way, been irritated into lung fever, pleurisy, or consumption. We repeat it, a little knowledge of the human frame would prevent this. Thousands of mothers suppose the stomach lies where the lungs do; and that what is swallowed, if it does not go directly to them, at least goes very near them. Others, however, do not know the difference between lungs and stomach, and never think but what the medicine they give goes to the lungs directly.

One of the most remarkable sympathies which exists, is that between the skin and the mucous membrane—especially those parts of it which line the stomach, the intestinal canal, the bladder, the lungs, &c. Many of the diseases of the last mentioned parts, are often caused by the sympathy of these parts with the skin—such as dysentery, diarrhœa, inflammation of the kidneys and bladder, &c. Nothing is more common in hot climates, than for the direct and powerful rays of the sun to produce severe and alarming internal disease. A friend of ours—a missionary at Singapore—on dropping a book from his window one hot day, under a vertical sun, went out without a covering for his head to pick it up, and was immediately taken so severely sick that he did not recover for several days.

We do not mean by this to discourage mothers from having their children in the hot sun; for if the head is moderately protected, and if they are properly and gradually inured to it, no healthy child will suffer from being much in the open air, in our climate, even in midsummer. Many more suffer for want of this exposure, than in consequence of it. All we wish to say, is, that such a sympathy as that which has been described, exists between these distant and apparently unconnected parts, and that *abuse* of the one may induce disease of the other. Weakness of the eyes, which are lined too with the same membrane, are very often induced by sympathy with the diseased lining membrane of the stomach.

Once more; there is a class of serious diseases exceedingly common in adult and later life, which would be vastly less frequent and troublesome, if mothers better understood the sympathies of the system, both healthy and morbid, and would govern themselves as they ought to govern themselves, in view of such knowledge. No mother who knew the right, and was determined to pursue it, would allow a daughter's chest, with the vital and maternal organs connected with it, to be compressed month after month, and year after year, at the hazard not only of the health of the daughter herself, but perhaps sooner or later of some tens or hundreds of others.

In short, no knowledge is more important—connected with this whole subject—than a thorough acquaintance with the great law of sympathy. We conjure mothers to study it, not hastily and superficially, but carefully. It would save a vast amount of suffering, to say nothing of an ocean, as it were, of pecuniary loss.

CROOKED SPINES AND ILL TEMPER.

According to the views of Dr. Combe, as well as those of other able writers of the present century on the same subject, "a true system of physiology is the proper basis, not only of a sound physical, but of a sound moral and intellectual education." "So long as life lasts," says Dr. C., "the mental and moral powers with which man is endowed manifest themselves through the medium of organization; and no plan which he can devise for their cultivation, that is not in harmony with the laws which regulate that organization, can possibly be successful."

These remarks are of special importance in their application to the development and cultivation of moral character in females. Take, for example, the qualification of a good temper. "If there be a good quality," says Duffin, in his work on the Spine, "which, more than all others, conduces to comfort and happiness, it is good temper." How just the remark, in reference to both sexes, but especially to females!

And yet, indispensable to comfort and happiness as this quality is admitted, on all hands, to be, we do not always find it. In the present state of civilization, violations of physical law are so frequent, that the cheerfulness, not to say good temper, of many a female is more or less impaired. Among the causes of ill temper, however, we know of none more general than distortion of the spine.

"Obliquity of the spine," says Dr. Duffin, "presents itself under numerous varieties of form, some of which are not only painful to the sight, but a source of distress through life to the individual afflicted, and irremediable by the best directed efforts of medical skill. Sympathy, however, conveys but a faint idea of the tormenting consciousness of physical inferiority which is perpetually haunting the thoughts of the objects themselves—of many innocent and amiable persons, who, to almost every other grace of the body, add every accomplishment of the mind, and not unfrequently possess a vigor of understanding that despises, though it cannot overcome, the paltry prejudice which converts a matter of mere accident into a source of mental inquietude, and sometimes into a cause of seclusion. The more highly the female mind is cultivated, the more intense must be its suffering under this state of moral exile."

Not indeed that obliquity or deformity of the spine is the only source, in civilized society, of the irritability of which this author speaks; far from it. *Deformity*, as he himself elsewhere says, *is almost always irritable and ill tempered.* With many, it is admitted, trials of this sort have been attended with the happiest effects;—have exercised patience and strengthened fortitude. The parent, however, does not thence derive a right to expose his offspring to such a trial. On the contrary, in every instance in which we avert or prevent deformity in ourselves or others, we stop at least one fruitful source of mental inquietude, or even bodily suffering.

The general statement that deformity and ill temper are often connected, as cause and effect, we have seen abundantly verified. So far as our own observation goes, a crooked spine, and much nervousness and irritability, are inseparable. We have more than once known the temper to be nearly ruined by this species of deformity. The following case is a specimen of what is frequently found in good society.

A young lady, naturally cheerful, amiable, and good tempered, was at length subjected to a train of influences which pushed out the right shoulder and left hip, and caused the whole body to incline forward. The spine became curved in two directions; first to the right, and next forward, so as to produce deformity of the neck and shoulders. The muscles of the back, neck and chest, together with the vital organs, being more or less disturbed or compressed, no longer fulfilled, to the proper extent, their regular office. Digestion was imperfect; respiration difficult; the skin and extremities cold; the liver and brain were affected; and the whole body greatly emaciated.

All this while she was becoming more and more uneasy and unhappy in herself, and a source of increased unhappiness to those around her. It was painful, exceedingly so, to find those features that were once cheerful, and the eye, that once sparkled with joy and beamed with happiness, now downcast and monotonous; the frame that was once agile and straight, sadly deformed; and the disposition, which was once benevolent, now soured and peevish. Nor was it *less* painful to hear the occasional remarks—not to say reproaches—of the mother. It is right that parents should have a degree of solicitude in regard to the settlement of their children for life; but after a mother has been one of the causes, however unintentional, of a daughter's seclusion from society, it is not right to cast on her the whole blame. It is quite sufficient to leave her to bear the whole, or nearly the *whole punishment*.

No female ought to be useless in a world where there is so much to be done. Nor is any mind so far buried in inaction and gloom, that it may not be, in some degree, raised again, and brought to act an important part in the social system. We do not mean to say that either the body or the mind, in these cases, can be restored to its primitive state; but the down-hill tendencies may be arrested, and life, and even a measure of health may be prolonged many years. A female should not, in any event, be permitted to become worse than a recluse—a misanthrope. In the case we have presented, the causes of evil at length, in the good Providence of God, ceased to operate; and though the physical deformity remained, the mental deformity was at length partially removed, and the calmness, not to say good temper, was gradually restored.

The question may be asked here—Why should a crooked spine thus affect the mind and injure the temper? Is not the brain, it will be added, the material organ of thought and feeling? Such an inquiry is natural and reasonable; but a full reply to it would lead us quite into the region of anatomy and physiology.

It may perhaps be sufficient for the present to say, that the spinal marrow is a continuation of the brain itself; and that whatever affects the former injuriously, might be expected to have some influence on the latter. Besides, it will be ovbious to those who are at all familiar with the law of sympathy, that when the spine is bent out of its place, the displacement will more or less disturb the action of all contiguous parts and organs—the lungs, heart, stomach, liver, thoracic duct, spleen, and nervous ganglions. These last, like so many little brains, preside over all these parts, and not only form a common bond of brotherhood, but also connect them with the more distant brain. For it is as true now as it was 2000 years ago, that if one member suffer, all the members suffer with it; and it is particularly true that if one of the vital parts is compressed, the mind is proportionably affected.

Dr. Johnson, in his work on "Indigestion," has the following striking remark, which it were well for not a few of our readers to ponder on. "Many an important undertaking has been ruined by a bit of undigested pickle—many a terrible and merciless edict has gone forth in consequence of an irritated gastric nerve!" If such is the connection of mind and body, that a little temporary irritation of the stomach may transform us into monsters, what must be the injury, when not only all the nerves of the spinal column—amounting to thirty pairs—but also the nerves of the heart, lungs, stomach, &c., suffer permanently? Yet such is the inevitable result, whenever the spine is habitually distorted or compressed in the slightest degree. This is well known to medical men, and might be known to all, were the structure and laws of the human system made a subject of universal study.

We have said that the general cheerfulness of many a female is more or less impaired by violations of physical law, and in particular by spinal distortion. This is undeniably true; nor does the statement express the whole truth. "The whole world," says the Scriptures, "lieth in wickedness;" and it might be asserted of the whole civilized world, with nearly as much of truth, that it "lieth" in spinal deformity.

As long ago, at least, as the year 1550, medical men were engaged in investigating the nature, causes, and best means of preventing spinal deformity; and Pinæus, who flourished in 1580, affirms that "of fifty females of the higher and more civilized ranks of society, scarcely two could be found who had not the right shoulder higher and more projecting than the left." One cause of this distortion may be gathered from the advice given, which was, "the discontinuance of corsets, and other bandages calculated to disfigure the human frame." The evil has been on the whole increasing, with the advance of civilization, from that day to this. Dr. Warren, of Boston, says that "of the well educated females within the sphere of his experience, about one half are affected with some degree of distortion of the spine." Others, and that not a few, make the proportion three fifths; and some nine tenths. In city and town we believe it to be full nine tenths; in the country it is probably somewhat less.

The truth is—we repeat it—that every degree of compression of the chest, and every unnatural or confined position of the body, tend to spinal distortion, and to all the physical and moral evils connected therewith. Nothing can prevent an amazing degeneracy in our population, physically and morally, but such a course of physical education, and such kinds of employment in subsequent life, as will secure to both sexes, especially to females, not only healthful and perfect spinal columns, but also the healthful play of all the machinery with which the spine and brain are wonderfully but mysteriously connected.

ADOLESCENCE.

The season which intervenes between the age of fourteen or fifteen, (or what has usually been considered as the period of puberty,) and the age of twenty-one in females and twenty-five in males, or the era of full manhood and womanhood, is sometimes called adolescence. This, in both sexes, whether we regard mind or body, is a period of very great importance.

During this period, very marked changes occur, especially in our own sex; among which Dr. Dunglison notices the following:—"The skin looses more or less of its delicacy and whiteness, the hair becomes darker, the cellular tissue condensed, and the muscles more bulky, so that they are strongly marked beneath the surface, and the beard appears. The encephalon (or brain) has increased in size, especially at the posterior and inferior part—the cerebellum—and has become firmer. The ossification of the bones in the direction of their length terminates towards the end of this period. The muscles become more red and fibrinous, losing the gelatinous character they previously possessed. The larynx undergoes great augmentation, and the glottis particularly, is elongated and widened."

Nothing of all this is more remarkable than what is said of the ossification of the bones. Is it then true that the long bones do not become firm in woman till about twenty years of age, nor in man till several years later? Some of the older writers have indeed represented ossification as being complete at about the age of eighteen; but the fact is believed to be otherwise.

The long bones are for the most part those of the upper and lower extremities and the ribs; in other words, they belong, generally, to the parts of the system most concerned in sustaining the weight of the body, in carrying it about, and in administering to its various wants. Each of these is formed, originally, of three pieces—a central or longer piece, and a shorter piece at each end. The first or longest portion becomes ossified comparatively early in life; while those at the ends remain more or less soft till the period of which we have spoken.

Is it asked what they are before they become bone? They are at first mere jelly; but they gradually become hardened into cartilage, or something not unlike gristle. These cartilages become more and more firm and dry, till at length, like the rest, they are ossified or changed into bone.

The great practical doctrine to be taught in connection with these facts, is the danger of suffering these unossified parts to remain too long in any wrong position, or even in any position which involves much compression.

Thus, much standing at any time before the age of twenty-one or two in females, and twenty-four or five in males, would, almost inevitably, compress the cartilages at the upper and lower ends of the bones of the thighs and legs, and if it did not injure the machinery of the joints themselves, would at least shorten and somewhat disfigure the limbs. But the greatest derangement in the lower limbs would take place at the ankles; which of course support the whole weight of the body. Not only would the cartilages of the lower end of the leg bones next to the ankles be deformed and injured, but the foot, which is naturally arched from side to side and from heel to toe, would be pressed down on the centre of the arch, and rendered almost as flat as a board. Such in fact is the result of placing young children of both sexes in factories too early, and keeping them, (as is sometimes the case,) standing all day, or even a great part of the day. Hundreds and thousands in Great Britain, have the arch of the foot, in this way, ruined for life.

Now every one who has fastened a piece of board to the sole of his foot and attempted to walk with it, or who has ever worn a wooden shoe, knows full well the disadvantages of being flat footed. There is, however, a good deal of difference between walking in this way an hour or a day, and being obliged to walk so through life.

The worst of the case, however, remains to be told. The muscles, or rather the tendons of the muscles, by means of which we move all parts of the body which are movable from place to place at all, are nearly all of them fastened to the short portions of the long bones, which are so long in completing the work of ossification. Besides this, a very curious arrangement of the parts, at the joints, is often necessary for the protection of certain nerves, pullies, &c., which are found there, and which it is quite necessary to have play freely. But now too much compression of the parts, in standing, deranges all this machinery more or less, and renders it not only clumsy, but stiff. In truth it sometimes even lays a foundation for troublesome and deep-rooted disease.

But it is not being employed in factories alone that does the whole mischief. Any thing by means of which the limbs or other parts are kept long in an unnatural, or above all, a compressed situation, may be in a greater or less degree hurtful. Sitting too long at the school bench, or in the factory, if not quite as hurtful as standing too long, is at least exceedingly hurtful. So is sitting too much to read or write. So even is labor of any kind which is excessively hard, or which is even continued through too many hours of the day.

The truth is, that in order to do exact justice to the young, during youth and adolescence, they ought neither to be put to hard work, nor for a long time, at work which is even but moderately hard. They ought to amuse themselves much more in the open air than the customs of a busy, avaricious community now permit. Not only males but females should do this. How strange the practical belief, that as soon as the young, especially the female sex, reach the age of puberty, and many times long before, they must walk, always, with a mincing, measured step, lest they should not be genteel! A more idle, not to say dangerous mistake never was made. Encourage them to romp still, like children; the more the better.

In speaking of amusement in the open air, we do not mean of course that nothing will be amusement but ball playing or skating. There are a thousand things more useful in forming the character than mere *plays*, as they are usually denominated, though even these should not be excluded. Such are wanderings in search of flowers, plants, minerals, rare birds, animals, insects, &c. Such, too, are visits, in groups larger or smaller, and under suitable general direction, to behold objects of curiosity, natural and artificial. These in many places are numerous, especially the latter. Let them, in going and returning, run, skip, jump, talk, laugh and hallo, at least within certain limits; reserving to yourself, as the conductor, the right of putting a veto upon their proceedings whenever they become manifestly wrong.

How much better for the health—not to say for the social and moral well-being of the young, during the period of adolescence—were their education conducted more with reference to their own present improvement and future good, than our convenience and the means of gratifying our avarice. And how unaccountable it is, that in the vain idea of laying up for children, many a parent will not only grudge them all the hours they spend in amusement after they are old enough to work, for the sake of earning money, but actually place them in employments which tend continually to undermine their health, contaminate their morals, and perhaps even narrow their intellects?

It is even customary to desire to have our young people settled in life, pursuing business, educating families, and bearing all the burdens of society, long before the ends of the bones become solid. Nay, ministers must have the charge of parishes, physicians of patients, lawyers of cases, and teachers of schools, not only before either body or mind is mature, but before the bones are yet ossified. These iniquities of parents are visited not only upon parents themselves, but also on the children, and on society.

We protest against all this, as the education of avarice and selfishness, and not of benevolence—of paganism, and not of christianity. Nay, we recall the remark; it hardly deserves to be called the education even of selfishness; for with but one eye enlightened to the real good of ourselves, our children or society, *true* selfishness would point to a very different course of conduct. It would never teach us to spend two pence to save one, or to let our children do so. It would never teach us or them, to cut off life or render it imbecile at fifty, just at the period when we have acquired that experience in business which no wealth can buy, for the sake of getting into business five unexperienced years earlier. For every year thus saved, as it is called, before thirty, we lose two years of later life rich with practical wisdom and dear-bought experience. Let us then who are parents consider these things, and may he whose right and office it is to give efficacy to all truth, even the Spirit of Truth, make so much of what has been said as is accordant with the Divine law, subservient to the cause not only of health, but of righteousness.

PUNISHMENT SURE, THOUGH SLOW.

Sir :—I suppose I address you with feelings similar to those of a reformed drunkard, when he presents himself before an audience to advocate temperance principles, inasmuch as I must confess my own shame.

The inquiries I wish to make relate to what is termed "Solitary Vice." If I understand what is meant by it, I have been in the practice of it for twenty years. I was astonished to find what a hold it had upon me, and what an effort it required to free myself from it; and I fear that I am not *entirely* free. I informed you that my health had not been good, and I will now describe my symptoms as nearly as I can.

The first and most prominent was bad digestion, with much eructation. Food affecting me unpleasantly, I was obliged to abstain from nearly every kind of it, and confine myself to the simplest diet. I had an appetite seldom satisfied; was averse to any exertion, and my pulse slow and feeble; at one time I think it was only forty in a minute. I was also somewhat costive, with feet and hands cold, if the weather was not quite mild, &c., &c.

In these circumstances I applied to a physician; he called my disease dyspepsia. I took considerable medicine, but without any benefit. I have felt a crawling sensation at the top of the spine, or just above my shoulders, which I think you mentioned as one symptom connected with this vice. With the exception of perhaps six months, when my health was the poorest, I have been in the practice of this vice as I before stated. Had I an opportunity of seeing you, I would say much more. Perhaps I ought to add that my business is and ever has been farming, and my drink, for about fifteen years, has been almost wholly water; though in the hot season I have sometimes used milk or molasses with it. My health has not been as good this spring as it was last fall, although I think I have done something in the way of overcoming my bad practice. The energy and elasticity which I once had seem to be gone; and I fear that I have brought on a premature old age.

From what I have said, should you think my ill health was occasioned by the practice I have been in? If so, will you advise me what to do to gain a complete victory over my inclination? for when asleep, or but half awake, temptation has often come upon me with such power that I have not had energy to resist.

From the imperfect knowledge you have of my case, will you express an opinion in regard to my assuming the marriage relation? My age is thirty-five. Let me only add, that I was totally ignorant of the effect of my bad habit until I read your "Young Man's Guide."

Remarks.—The foregoing is merely a specimen of the kind of correspondence into which we were drawn, many years ago, by the publication of the Young Man's Guide. The writer of the foregoing letter first made a partial confession of his error, but dared not make a full disclosure, till he was sure his letter had fallen *into the right hands*, and had obtained an assurance that his name should not be made public. The truth is, that the country swarms with sufferers of this same general description, male and female. Until within a year or two, we have been slow to admit this, but stubborn facts compel us. We have the most unquestionable testimony that, *in this respect*, if in no other, the world "lieth in wickedness." The punishment, moreover, though mild like the foregoing, or long deferred, is finally inflicted.

There is one thing, however, in connection with this subject, on which the public mind greatly needs information. Like all other transgressions of natural law, this vice not only hastens the development of every disease to which the human constitution is predisposed, whether by inheritance or otherwise, but fastens a disease of its own kind upon those who were before healthy; in the first stages of which, as in the first stages of alcoholic disease, tobacco disease, coffee disease, or tea disease, the patient appears to be more healthy than before. Thousands of young persons are thus deceived; and sooner or later destroyed. Their increase of color and flesh only indicates, did they rightly apprehend their condition, that they are living at the expense of life; and that the time is not far distant, when, unless they reform, they must sink either into monomania, or without the intervention of this terrible disease, into downright idiocy.

Some may be startled, and perhaps doubt the truth of what we have here stated. Dr. Bell's "Hour's Conference with Fathers," if carefully read and properly understood, would probably remove their doubts, though it should not lessen their surprise. On this subject, however, we commend the reader not only to the work of Dr. Bell, but to Dr. Woodward's Hints for the Young, Graham's Lecture to Young Men, and our own Young Man's Guide.

BATHING AND WALKING.

Some of the following thoughts, especially on Walking, are not only curious, but new. They are extracted from a little work entitled, "Subjective Education," by Henry G. Wright, of England.

An excellent accompaniment, in the attempt to improve the diet, is a DAILY ABLUTION with cold spring water. The reason of this is obvious; for independent of the advantages of cleanliness and an unobstructive exterior, the cold water is contractile, and consequently, under the peculiar circumstances of a simplification, and the necessary diminution of want, extremely desirable. The bowels having been expanded to suit the extra quantity of food which indeed was necessary, so long as the supply was impoverished by cookery, will feel uneasy if deprived of the ordinary quantity; but if their capacity can be diminished by the contractile agency of cold water, the pain will cease. It is by another external application, the purpose of which is the same as the cold water, that the North American Indians support a long fast for many days. They diminish the capacity of the stomach, by a belt which they draw round them tighter and tighter in proportion to the increase of the stomach's craving. There is, moreover, in the consequences of the cold bath, a gentle and equilibriated excitement of the radical temperature, which is not only delightfully refreshing, but at the same time powerfully invigorating. The unenergetic and slothful will be roused by it to activity, and where the nature has been vitiated, distorted or depressed by luxurious habits, a general stimulus will be administered to the whole of the bodily energies. And with this auxiliary the difficulty of modifying the diet will be greatly obviated.

Another very important feature of a well-arranged physical education, is a properly selected series of gymnastic exercises; and among these, perhaps the most valuable is that department in which the pupil is instructed in the art of WALKING. A thorough muscular development is evidently needed, and no words are required to enforce its necessity; but there are peculiar advantages that belong to walking, that are not so clearly exhibited in the training of other parts of the body.

Without expatiating on the numberless beauties which momently strike the eye in a morning's ramble, the sweet sounds that fall upon the ear, the grateful odors that burst upon the sense, and moreover, the urgent persuasive appeals that nature makes to the rational power, to induce it to unlock the enigmas which she presents for its solution, the very act itself is fraught with the most healthful consequences. It promotes a genial circulation of the fluids, and draws from the brain that unhealthy concretion of blood which is so fatal, both physically and mentally, to the sedentary and studious.

Nature is so jealous apparently for the healthful preservation of all her works, that no sooner is a demand made upon any part of an individual, than she repairs thither with all a mother's solicitude to watch over and cherish it; so that there is developed in physics an inviolable law, in obedience to which there is ever found to be a rush of life to any part that is excited to action. And further, the life ingress is strengthening, sustentative and stimulant, where the exercise is wholesome, being at the same time primarily inflammative, and only secondarily curative, whenever abnormal action is produced. Illustrations of this law are every where to be found. A hen with a broken leg laid eggs without a shell, because the limy secretions were employed by nature in her curative processes; and indeed, most diseases will be found to be results of the same law: hence the nervous irritability of the thoughtful and imaginative, and the prostrate energies of the wastefully sensual. And as the law operates healthfully also, hence the well-developed muscle of the laborer, and the clear discernments of the self-collected.

To all abnormal cerebral action, then, walking is counter-operant—drawing to the lower extremities of the body the vital heat, which again, in order to secure equilibriant uninflammative circulation, must be re-attracted to the brain by thought exercise. Walking for the support of the lower circulation, and thought for the higher, seem to be the normal conditions of health and vigor.

The increasing efforts of nature to secure an equilibrium of circulation, is an assignable cause of much of the irregularity which shocks the finer sensibilities. The thoughtless, who are, at the same time, laborious, obey blindly an imperative law, when they betake themselves to liquoral stimulants; for the nerve system may be left in the rear, while all other parts of the constitution progress; and the want, the deficiency therein experienced, must be supplied, either abnormally or in accordance with pre-adapted conditions. The pre-requisites for nature's harmonious circulation are thought and exercise—either being wanted, the end is not secured.

For the purposes of usefulness, walking must not be left to casuality; habits are proverbially powerful, and when beneficial, must be initiated very early. It is not enough for a parent to say that her infant is on the foot all day, and takes sufficient exercise; the duty remains still, that some part of it be *directed*. The child that can pace the garden five times, must be led once round it under instruction; the boy that can run ten miles at his play, must be *taught* to run five. The writer could instance young ladies that are delighted, rather than fatigued, with a pedestrian effort of ten miles; and Mrs. Newton, the wife of that gentleman whose family has been so often instanced as fine specimens of the benefits of a Pythagorean diet, a lady educated in all the delicacy of an elevated societarian station, was able to walk thirty miles in a day. And if it be said that such a feat is undesirable, it must be remembered, on her behalf, that her clear understanding and vigor of purpose and execution were no less remarkable. With like conditions, similar results would happen in other cases. It cannot be otherwise than that the pure moral being, thoughtful and pedestrian, should be healthful.

BURYING ALIVE.

The fear of being buried alive has filled many a mind—for the moment, at least—with horror. Nor is the fear wholly without foundation. By our half savage custom of performing the funeral rites too early, we have no doubt that some dozens, if not scores, of individuals, taking the whole country into consideration, are buried alive every year.

We refer, of course, to the ordinary method of interment—some four, or five, or six feet below the surface. But there is a species of burying alive which not only occurs much more frequently than the former, but is also, to our own apprehension, much more horrible. In the one case, the spirit escapes and returns to the God who gave it; in the other, the soul is buried as well as the body. Do we seem to utter paradoxes? Let us explain.

The healthiest adult human body contains several pounds of earthy matter—principally, we believe, phosphate of lime. This, however, in a healthy state, is found only in the bones, where it ought to be found. In these circumstances, the earthy matter does not interfere at all with the functions of the body or the motions of the mind.

Since, however, few if any persons are found in a perfectly healthy state, the inquiry may be naturally raised—How is it with the earthy matter, in a state of disease? Is there more or less than the usual proportion?

In some cases there is more, in others less. In rickets, (mollities ossium,) and perhaps too in scrofula and a few other diseases, the gelatinous part of the bones is in too great proportion, and there is a deficiency of earthy matter. Whereas in gout, dyspepsia, and all that class of diseases which have their origin in want of proper exercise, there is apt to be a prodominance of the earthy matter; and in some, the proportion is very great.

This earthy matter, in the case just mentioned of a want of action, is not confined to the bones. In gout and some other diseases, large masses—concretions, as they are called—are found about the joints. In other instances, calculi are found in the bladder, kidneys, gall duct, and elsewhere. In others still, bone is deposited in the heart, arteries, and in truth in almost every part of the body. Some persons are so full of bony vessels—ossified parts, as the books call them—that they can scarcely be bled by the surgeon or physician on account of it.

Now this having the bony parts of the system nearly *all* bone, that is, nearly all phosphate of lime, and the soft parts of many of them *earthy*, in a greater or less degree, is as unfavorable to the free and healthy action of the mind, as it is to that of the body. The person is, as it were, buried alive; at least partially so. And to repeat what has been already said, the burial is that of the soul as well as the body. Covered—interrupted at least—by the ossifications every where, the brain, ganglions and nerves, those material organs of the spirit, but poorly perform their office. The individual, it is true, continues to breathe, and to be reckoned among the living; but it is to comparatively little purpose.

Such a living death—rather perhaps we should say, dying life—may be avoided. Those who have proper exercise of all the parts and organs of the body, who breathe pure air, and receive none but plain and healthy food, will not be likely to be buried *above* the ground before their time; nor indeed so often *below* it. The instances of premature burial are much more frequent than they would be if every body obeyed the laws of health and life.

ERROR IN EATING.

The following letter is from Bath, Maine. It is at once interesting and important.

Dr. Alcott:—Your article on bread and milk, in the Teacher of Health for last March, reminds me of a case which I intended to have reported some time since, but neglected it.

Mr. William Campbell, of Phippsburg, Maine, a very industrious and respectable farmer, went a fishing, and toiled all night at fishing without sleep. He arrived at home about five o'clock the next evening, when he ate a hearty supper, and went into the field and hoed potatoes until dusk. He then returned to the house, ate a bowl of bread and milk, and retired to bed. In the night his wife was awaked by a few convulsions of her husband, which soon ended in his death.

The case was passed over in the neighborhood, as all such cases are, without inquiry into the causes; supposing that neither he nor they had any agency in it whatever. And thus, one after another finds a premature grave in consequence of the ignorance which prevails with regard to the causes of disease and death. They never investigate the causes, but follow on in nearly the same course, until they come to an untimely end.

Mr. Campbell carried provisions with him, and probably ate as much as was necessary. But when he got home, he must have something extra, because he had been so long without any regular meal. The truth however is, that to eat a hearty or full meal when the system was in such a debilitated state, was wrong. It is also wrong to perform any laborious exercise on a full stomach; for digestion cannot be performed properly in such a case. But it was much worse in his case, when the system had been worn down by fatigue and the want of sleep; and worse still, to eat a bowl of bread and milk on a stomach already over-loaded and debilitated, and immediately retire to bed. In such a case he no doubt soon fell asleep; and though vitality made all possible effort to relieve the system and keep the supremacy, yet after a few ineffectual struggles, she was compelled to give up, and sink to rise no more.

Respectfully yours, &c.,

Samuel D. Reed.

P. S.—I have thought that if every city and town would appoint some suitable persons to investigate the causes of every death, and publish them, it would do much good.

DRINKS AND THIRST.

The following letter was probably elicited by remarks in the public papers concerning certain experiments of our own to show to what extent thirst, as it is usually called, is unnatural and arbitrary. Our own belief, that man, though not a beast, is yet a drinking animal, is already known.

Dear Sir:—In answer to some questions which have been before the public, I would merely say that I believe man to be frugiverous by nature, placed at the head of the animal creation, and directed to "have dominion" over all the lower orders, and to bring his own body under the law of his intellectual faculties. In order to do this, the blood which passes through the brain must not be too thick or impure; if it is, the mind will suffer more or less. We are all aware that the man who eats flesh, requires to be bled oftener than the fruit eater; consequently fruit in its natural state is the best adapted to the wants of the animal economy of man as a species.

To this conclusion I have also come, by comparing one animal with another in the scale of God's animated creation.

For the last ten years my diet has been fruit and vegetable substances, with the exception of a few weeks in which I partook of flesh meat, to please some of my friends. I am more convinced now than ever, that mankind were not originally designed to live on the flesh of beasts or creeping things, but on the natural productions of the ground. I always eat fruit without being dried or cooked, when I can get it; and bread stuff prepared with water alone, without salt or other seasonings, and without yeast or fermentation of any kind, so that it may be called unleavened bread. I take my food in the morning and evening, and am particular in the quality and quantity; that is, two meals during the twenty-four hours.

As far as drinking is concerned, I have been without feeling thirsty for six months at a time, though I took no fluid except what was contained in the fruits I ate. At the end of this time I ate raised bread with salt and dried fruit, which caused me to feel thirsty, and then I took some water, and have continued to do so whenever I have felt the want of it, but that is seldom. Sometimes weeks and months pass without my thoughts being turned to the subject. If I could always get fruit which suited me, it is probable I should never drink again, or feel the want of it.

Again I would say, man is not a spitting animal, when he is in perfect health, and his food and other habits are adapted to his original organization. Neither will he use a handkerchief for the purpose of cleansing his nose, and for the good reason that it will not need his attention. It was not made for such a purpose; but only to breathe through, and to detect impure substances.

Those who wish to examine this subject, would do well to consult *Burdell on the Teeth;* also my notes and appendix to the life of Louis Cornaro, on the natural or original food of man, and comparative anatomy in relation to the teeth and alimentary canal of man compared with animals, &c., and the Health Almanac for the years 1842, '43 and '44.

Before I commenced living in the simple way I have described, I was subject to the headache for upwards of twenty years; and it could hardly be said that I enjoyed life. Now I am free from all pain; my mind is more clear, and I have but little difficulty in keeping the lower propensities under the control of the moral and intellectual man.

I always bathe my body in cold water every morning as soon as I get out of bed, throughout the year, and have taken but one cold during the last seven years.

JOHN BURDELL.

New York, June 1, 1843.

LECTURE ON THE HUMAN SOUL.

SUCH is the title of a pamphlet of 48 pages, recently issued in this city, and for sale by G. W. Light, 3 Cornhill, up stairs. Though we have not examined the Lecture so thoroughly as to be very confident in the hasty opinion which we have formed concerning it, yet so far as we have gone, our impressions are rather favorable. The modesty of the style and manner of the author are certainly to be commended. Let him, at least, have a hearing. He is the friend of body—that very dear object in these days—as well as of soul. One who is better acquainted with him and his pamphlet, thus explains the object and end of both :

"The object of this lecture is to show the important relation subsisting between the material and the moral nature of man ; in other words, between the soul and its material habitation—by means of which the condition of man's soul or spiritual nature is invariably modified by the condition of his material or physical nature. And hence the necessity of keeping the latter in a proper condition, in order that the soul may be in a right condition also. And the means by which that may be done are briefly pointed out. The author does not wish to be understood, in his manner of treating the subject, as undervaluing the elevation and refinement to which civilized society has attained; but merely to express his firm conviction, that with all his powers of invention, man can never become so favorably situated for real enjoyment of existence, as he would be were he in such a state of perfect adaptation to the material world as that in which the Creator at first placed him. And though he may reap considerable advantage, and secure no small amount of enjoyment from his existence in connection with customs and institutions as they now are, yet the important truth still remains, that just in proportion as existing institutions and customs and opinions come into collision with the great laws of relation by which God has bound together the material universe, in the same proportion will they ever be found to preclude that perfection of his nature, and that degree of happiness to which, as a child or even a creature of God, he is a lawful heir."

Of one thing, at least, we are fully confident—that our author has not attached too much importance to fruits as an essential part of human diet. Not indeed that they are to be used at all ages, and in all circumstances and conditions, without sense or discrimination. They should be ripe; should be taken as a part of our meals—in the morning or at noon; and should not be much used by children under two years of age.

CHAPTER OF INTELLIGENCE.

Improved Children's Cradles.—Too much importance can hardly be attached to that which bears directly or indirectly upon the health of the young. Some may indeed affect to "despise the day of small things;" but is it not at the peril not only of themselves, but of those whom they love better than themselves?

We have been led to this remark, by seeing before a shop door in this city, the curious combination of a child's cradle and crib. Long has the infant been immured and slowly smothered in a deep box, surmounted perhaps with a sort of hood, which excluded the air almost as effectually as if such a result were the sole object. What this box cradle did not do, moreover, in the work of slow destruction, the trundle-bed finally accomplished. But here comes a crib, so elevated and so constructed generally, as to allow a free ingress of the air on all sides, and yet so supported as to have, when required, a gentle rocking motion. Thus the believer in cradles may here have the full benefit of one—if benefit there be—without violating the laws of health in any considerable degree.

Substances in the Throat.—An individual in Palmer, in this state, lately ejected from the throat a bone seven eighths of an inch long, and about half an inch wide, which had been firmly fixed in the throat about two years. And yet during this whole period he had experienced no suffering, except from occasional attacks which resembled asthma.

Tubercles in the Lungs.—A child a year old, of *apparently* healthy parents, (we cannot vouch for its grandparents,) sickened and died not long since at Cambridgeport, on examining which the lungs were found studded with tubercles beyond number. The physicians had referred the disease to the brain; but on opening it, the brain was less diseased than the lungs. Do parents know that in the present state of society, a large majority of the children born have tubercles developed, sooner or later, in their lungs; and that if subjected to the common abuses which exist, they will be likely to end their days with consumption, or some other lingering disease? Do they know that there is no certain safety but in the use of abundance of exercise, light and pure air, with strict obedience to all physical and moral law?

Saleratus in Food.—Mr. Perry, of this city, who for many years had been a vegetable eater, at length began to suffer from pain and spasm in the intestinal region, which he could refer to no adequate cause. His sufferings finally became severe, and he was on the point of returning to the use of flesh and fish, and as he says, denouncing the whole vegetable system.

All this while he was in the use of bread and other food which contained much *pearlash* and *saleratus*, (for they are nearly the same thing;) but though he knew his error, he could not believe it to be an error of much importance. One day, after eating a piece of gingerbread, his suffering was unusual, and his suspicions became confirmed. Of course he abandoned the use of both pearlash and saleratus. On examination it appeared that he had frequently taken more of the alkali at a meal than physicians were accustomed to give as the largest doses their patients could bear. Nor was the quantity that he took at all unusual. Thousands in our country—perhaps millions—take more of these substances than Mr. Perry did; and not a few invalids like him experience severe tortures as the punishment of their transgression, without ever perceiving the connection. Nor do the more healthy escape. So much used are these poisons, (as we have long taught that they are,) in our every-day cookery, that it is no wonder we find nearly the whole civilized world with the mucous membrane, which lines the alimentary passages, in a state of sub-inflammation. There is no more propriety in using alkali in our food, than calomel or jalap; nor is there much more safety. No person can use them without suffering therefor, sooner or later, and in a greater or less degree.

Since writing the preceding paragraph and making a tour to the eastward, we have found that the use of saleratus, in Maine and New Brunswick, is almost beyond description. A mother in New Brunswick lost eleven children, for whose sudden and strange death, but somewhat similar sickness, the physicians could find no cause but the excessive use of alkali. Thousands of children are destroyed by it every year, without the cause being so much as suspected.

Strength without Spirits.—At a temperance meeting held in Alabama, Col. Lehmanousky, who had been twenty-three years a soldier under Bonaparte, addressed the meeting. He arose before the audience, tall, erect and vigorous, with the glow of health in his face, and said—" You see before you a man 70 years old. I have fought two hundred battles, have fourteen wounds on my body, have lived thirty days on horse flesh, with the bark of trees for my bread, snow and ice for my drink, the canopy of heaven for my covering, without stockings or shoes for my feet, and with only a few rags for my clothing. In the deserts of Egypt I have marched for days with a burning sun upon my naked head, feet blistered in the scorching sand, and with eyes, nostrils and mouth filled with dust, and thirst so tormenting that I tore open the veins of my arms and sucked my own blood! Do you ask how I could survive all these horrors? I answer, that next to the kind providence of God, I owe my preservation, my health and vigor, to this fact, *that I never drank a drop of spirituous liquor in my life.*"

The distinguished Baron Lassey, a French surgeon, also asserts that nearly if not quite every soldier of the 6000 of Bonaparte's army who returned from Egypt, was a cold water man.

Abstinence from Food.—The Baltimore papers mention the case of Phebe Dean, eleven years old, who for the last four months has suffered from fits, and who for fifty-three days has not been able to taste the slightest food or nourishment of any kind. She is said to be a living skeleton; and is supposed by her physician to be laboring under an affection of the spine.

A Veteran.—Died in Washington, D. C., the 17th of May last, in the 88th year of his age, Peter W. Gallaudet, Esq., a soldier of the revolution, and for thirty years before his death, a vegetable eater.

German Silver.—It is denied by a German physician in New York that German silver is of a poisonous nature. He says it bears the test of acids as well as common silver. It is easy to settle the question by experiment. We regard it, and have long regarded it, as settled.

TEACHER OF HEALTH.

AUGUST, 1843.

MODERN NERVOUSNESS.

"How many persons, of every age," says a distinguished French writer, "complain of being nervous! Their symptoms may vary extremely and change very suddenly, but they are generally, or always, indisposed in one way or another. Every thing affects them disagreeably; cold, heat, dryness, moisture, rain, snow, food, drink, exercise, rest, in fact all these modifying circumstances find in them an organization ready to be acted upon."

Now this statement, though made in France, is not to be considered as applicable to France alone; it is true, to a greater or less extent, of all highly civilized society. Not indeed equally true of city and country; but greatly—we might say lamentably—true of both. So common is it, in fact, that not to be nervous is not to be fashionable; or in other and plainer words, it is to be unfashionable.

And here we have occasion to remark, that this nervousness falls with most severity precisely where it can with least safety to society be borne. If the child alone was nervous, and appeared in his progress to outgrow his nervousness, we might hope the injury to his constitution would not greatly affect his future well-being, and that the world would not be losers by it. If the old alone were affected, it is easy to see that the influence on the social system would be scarcely felt. Having finished their work, and left their impress on society, they might be suffered, in their age or decrepitude, to fall into a state of physical and moral uneasiness and unhappiness. Again, if it were the male sex alone, the evil would be comparatively trifling.

But alas! the scourge—for such it must be deemed—falls most heavily on that class of persons who are destined to influence most, directly or indirectly, all other classes—I mean females; and in particular *young* females. It falls upon those who, let what will become of others, ought to have firm health, and be as independent as possible of outward influences and circumstances.

Can it be the intention of Providence, that nearly the whole female sex from the age of fifteen to twenty-five, should be the puny, dependent beings they now so generally are? It is not so with the youthful of any other known species of animals. On the contrary, this is with them the age or season of greatest apparent health. Health would even, by their gambols and sports, seem to be almost in excess at the approach of maturity.

And when we look at our bills of mortality, and find that while one in every forty-three individuals dies annually, in the United States, between the ages of twenty-five and thirty-five, and only one in two hundred and eleven between the ages of fifteen and twenty-five, or little more than one in the latter case to five in the former, may we not say that facts show us, beyond the possibility of doubt, that this early age was designed, by the Creator, to be a season of health, and not of sickness or suffering? How is it, then, that so many are sowing, during this whole season, those seeds that not only spring up into great immediate suffering, but produce, at remote periods, deep-seated or incurable disease?

There was a time in the history of our country—there is a period in the history of every country—when the muscular system predominated, and the nervous system, with all that in a more advanced state of civilization is called nervousness, was but feebly developed. In such circumstances, diseases were for the most part acute and rapid—quickly terminating either in death or recovery. Physical transgression indeed existed, but the penalty fell not so much on the nervous as on the respiratory and circulatory systems; and there was more of fever and inflammatory disease, than of neuralgia and scrofula and consumption. Even the punishment of the drunkard, which now so often appears in the form of delirium tremens, (a disease of the brain and nerves,) was visited on the muscular system or the vital organs.

But in exact proportion to the march of mind—and it should be said of *body* too—there has been a change in the tendencies of the system to disease. There may be—there probably are—fewer *deaths* before and during the period of adolescence; but there is much more of chronic disease. In the former case, the major part appear strong and vigorous; in the latter, the majority appear diseased, or at least nervous;—so much so that the very standard of health and beauty is reversed. There are more delicate, transparent skins, but there are also more excited brains, hearts and lungs; and more distorted spines, narrow chests, disordered stomachs, distempered livers, cold feet and sick headaches. There are more bright students, polished gentlemen, agreeable companions, devoted lovers,—but less health of body, mental vigor, and sound common sense; and fewer faithful friends, with the prospect of fewer good wives and mothers and house-keepers.

For to say nothing of the loss of comfort in the want of that high-bounding health for which youth was designed by its Creator, how poorly do that education and those habits which involve a constant dependence upon surrounding circumstances, prepare us for the future! How poorly are those individuals calculated to be continually happy, and to make others so, who are affected by every breath of wind which blows not from a particular quarter: who are liable to suffer severely, if not from every particle of dew, at least from every drop of rain which falls on their clothes: who cannot rise early without headache, followed by a cup of coffee, to cure it; or take a walk before breakfast, or ascend a flight of stairs, without being out of breath,—or during the forenoon, without being unfitted thereby for the duties of the day: who cannot rest without feathers or eider down, and comfortables; nor even with the aid of these, till gay company or exciting books have chased away "the tedious hours," and the "clock strikes one:" who cannot enjoy plain and healthful viands, till they are so despoiled by fashionable cookery, that one might imagine gout, dyspepsia, and all sorts of diseases to be "lying in ambush," as Addison says, "among the dishes:" and who cannot keep their very frames, to use their own expression, from "falling to pieces," till they are bound up, like Egyptian mummies; or encased in bone and steel, like ancient gladiators.

If this miserable condition—this dependence on the outward for happiness—whose whole tendency is to nervousness and nervous disease, were in the nature of things unavoidable, or if it were inseparable from that stage of civilization which it so generally accompanies, the case would be altered. But it is not so. Though beset by danger and greatly straitened by difficulties of various sorts, there is a more excellent way. Though we cannot wholly escape an influence that, like a Bohon Upas, poisons the whole moral atmosphere—the influence of a general bowing down to "other gods" than the true—yet we may do something. If Fashion sways the sceptre and demands universal homage, we are not quite *compelled* to obey. Or if in any instance we may suppose *ourselves* necessitated to bow in the house of Rimmon, we surely are not obliged to make our *children* pass through the fire; nor as Christians, have we a *right* to do so.

I have spoken of a more excellent way. That way consists essentially—for there is not room in the narrow limits of a few paragraphs to enlarge on the subject—in a harmonious and healthful education; by which is meant a proper development and cultivation of the whole nature and character. To develope and cultivate the physical powers merely, though it might prevent nervousness, would not secure the happiest results—indeed, it might serve but to bind the intellectual and moral nature in stronger chains. Let us not, therefore, in attempting to avoid Scylla, encounter Charybdis. Nor let us hope for the happiest results in the cultivation of the mere intellect. This method has been sufficiently tried—always, however, with entire failure. Nor let us even look for the more excellent way in a perfect development and cultivation, were it possible, of the heart alone. Hand, head and heart must be made strong simultaneously. The work must be early commenced, and incessantly and perseveringly pursued, as the main business of life; or at least of family education. No one of the three great departments of our nature to which I have alluded, must be sacrificed to the rest—above all, what has been just now designated by the term *hand*. There must at all events be strong and firm muscles, a full chest, energetic heart and arteries, steady nerves, and a sound and vigorous stomach. There must be a physical condition which would seem to bid defiance to ordinary circumstances, and even to serious difficulties, instead of quailing, as now, to their influence. The individual must be trained *to*, not stinted *by* laborious employments: and must pass much time, both in labor and recreation, in the open air.

Whatever, in one word, tends to harden and invigorate, rather than to soften and effeminate, must at all reasonable hazards be effected. This, though not the first thing in importance, is at least the first in order. Would we secure correct moral results, we must first aim at correct physical habits; not so much, indeed, for their own sake, as for the sake of the better and nobler and higher;—as *means* rather than as *ends*. The maxim that a sound body is essential to a sound mind, is as true now as it was two thousand years ago; and will be as true two thousand or two hundred thousand years hence as it is now, or ever has been.

That the premature death with which our community abounds, especially of the younger and fairer of the female sex, is intimately connected with extreme nervousness, as a cause, cannot be doubted. The very delicacy which precedes—so striking as to induce a belief long ago that death delights in or prefers a "shining mark"—is most fearfully indicative of scrofula, if not of consumption. And yet the mortality of our country, from this source, is little more alarming than the disease and suffering which, though they do not always prevent our attaining a tolerably old age, greatly diminish our usefulness while we live; except as they furnish a trial for the faith and patience of our friends. And while we are congratulating ourselves that the average duration of human life is, in most civilized countries, increasing, it should also be known that the average amount of sickness, or at at least of what is usually called bad health, is increasing also. Above all, it is a well established fact, that the average amount of female health is vastly less than it was half a century or a century ago, and is becoming less and less in every succeeding generation. Our chief hope, under God, is in an entire reform in female education, not only in the family and in the school, but in all places where character is formed or modified.

THE FORCE OF PREJUDICE.

In most acute diseases—diseases which, according to some writers, constitute two thirds of the ills to which flesh is heir—the circulation is more or less affected. Hence the importance of understanding well the philosophy of this circulation may be at once seen by all. In this respect, however, the wisest medical men had, till about two hundred years ago, not only groped in ignorance, but felt and acknowledged that ignorance.

In 1628, Dr. Harvey, an Englishman of the most undoubted scientific attainments, made public, in an essay, those doctrines on this subject which are now, for aught we know, universally received, and which are no doubt the true doctrines. He not only declared them, but sustained them by facts and reasonings which none could well gainsay or resist.

Yet what were the results? Did those who had long deplored the darkness which prevailed, rejoice in the flood of light thus suddenly thrown on their path, and hasten at once to walk in it? Was the name of Harvey every where lauded, and his society every where courted, especially by those who knew how to appreciate worth and reward merit?

Far indeed from it. Dr. Harvey not only lost much of his business in London as a practitioner, which had hitherto been extensive, but he met with the still greater misfortune of finding his doctrine almost every where repudiated by the wise and good. According to Hume—and we do not know that his statement on this subject has ever been disputed—no physician in Europe, who, at the time of Harvey's discovery had reached forty years of age, ever to the end of his life publicly admitted it.

This is one of the most signal instances of the force of prejudice which is on record. For it was not the ignorant alone that shut their eyes against the light in this case, but the more intelligent also; the very individuals who should have been the first to take him by the hand. Is there then no perversity in human nature? Do mankind really love and seek truth as anxiously as some of the wise ones among us pretend?

We who teach the laws of health, are sometimes inclined to complain that people not only refuse to hear our words, but even set themselves against us. But can we expect to be more favored than Harvey? Why so? Has human nature essentially changed in the progress of two centuries? Do not men love darkness rather than light as well now as ever? Should we not, instead of complaining, greatly rejoice, that it is not worse with us? Is it not enough that we are permitted to teach on without molestation and without imprisonment?

Let us rejoice in the good we are permitted to do—in the feeble rays of truth we are permitted to scatter—instead of murmuring because we are unable to do more. Let us go forward and accomplish all we can in the future. Let us leave what we cannot do to others. We are not required to do that which is beyond our power; why should we too ardently desire it?

> " Who does the best his circumstance allows,
> Does well; acts nobly; angels could no more."

CONNECTION OF MIND AND BODY.

"As a man thinketh, so is he;" and "according to your faith so be it unto you," express a truth which belongs at once to philosophy and physiology. The influence of faith, belief or opinion, on the body, is unquestionable.

We have seen children of two, three or four years of age shiver in the cold bath, because they feared, beforehand, it would be cold to them. The proof of mental influence in this case is derived from the fact, that when the same process in the same circumstances, or those which nearly resemble it, is submitted to cheerfully and without apprehension, there is no shivering.

The same truth is applicable almost every where in life and in nearly all circumstances. Things are, to a very great extent, as we apprehend them. If we expect a room will be cold at 60 degrees of Fahrenheit, it is very apt to prove so. If we expect to be fatigued with a certain kind or degree of exercise or labor, we are apt to be so; and the contrary. So if we expect to catch cold or any other disease—even small pox—we are very apt to find it so. On the contrary, he who does not expect to be sick or to be assailed, may walk unscathed through dangers by which the more timid man would be destroyed.

We might illustrate the principle at which we aim by numerous examples, but a few will be sufficient for our present purpose. We wish, if possible, to fasten the conviction on the minds of our readers, that just as surely as the expectation of being wealthy, wise or good, tends to such results, so surely does the expectation that we shall be healthy or diseased tend to make us so.

In Paris' Life of Sir Humphrey Davy, we are told that Dr. Beddoes once went to him with a patient who was greatly afflicted with one species of palsy, in order that he might receive the nitrous oxide gas, but without explaining to his patient the nature of the operation. Before administering the gas, however, a thermometer was placed under his tongue, to ascertain the general temperature of his system. The patient, not so much as imagining what was to be done, no sooner felt the bulb of the thermometer under his tongue, than he declared he was better. The gas, therefore, was not given, but the man was required to come and be operated upon in the same way the following day, which he did, and with similar happy effects. In fine, after repeating the operation of placing the bulb of the thermometer under his tongue every day, for a fortnight, the patient was dismissed, perfectly cured.

Equally worthy of our credit, though it may seem to partake a little more of the marvellous, is a story which Dr. Gregory, of Edinburgh, was accustomed to relate to his students.

Having ordered a young patient of his—a medical student—to take an anodyne at bed time, the young man understood him to say a cathartic. The medicine was accordingly taken in the full expectation of laxative effects; which, in truth, were realized. When Dr. G. asked the next morning what effect the anodyne had, the sick man exclaimed with great surprise—" Anodyne, sir! did you not send me a cathartic?" By no means, said the doctor, it was an anodyne. Well, said the patient, it has certainly operated as a cathartic, and I feel greatly relieved by it. Now it is quite possible that the condition of the young man was such that the anodyne produced cathartic effects independent of the state of the mind; still it is scarcely probable.

It is on this same principle that medicines in general, not only in the hands of quacks, but in those of regular physicians themselves, have much of their efficacy. The influence of charms, and conjurations, and incantations, to restore health among savages, is well known. We are none of us, in this respect, but little elevated above the condition of savages. We are the continued dupes of our fears;

" And feel a thousand deaths in fearing one."

RENOVATION OF THE BODY.

It is interesting to know that there is a day coming—as the volume of Revealed Truth fully assures us—when these bodies, now so frail and perishable, and so frequently and deeply diseased, shall be not only redeemed from their imperfection, but placed in a condition to remain so forever.

There is, however, a species of renovation which the book of science, revelation's own handmaid, has taught us to secure, this side of the eternal world; a renovation which would bring with it effects immeasurably happy; and which we cannot wholly neglect and be guiltless. Let us dwell, for a few moments, on this most interesting, and as we shall see in the detail, highly practical subject.

That every living animal body is subject to continual waste, is a doctrine which no one will deny who knows that every such body grows, as well as maintains its existence after growth is completed, through the instrumentality of thousands of vessels of greater or smaller size, having within their cavities nutritive fluids, formed from newly received food and drink, which they distribute to all parts of the living organic domain, or carrying out of the system such fluids as are no longer fit to be retained in it. It is impossible that such incessant motion should be performed for a single day, without great waste, on the one hand, of old particles, or without considerable additions, on the other hand, of new ones.

The ancients believed that the living body was renewed or renovated once in seven years; and there are those, even at the present day, who inculcate the same opinion. Now if it were established that in some healthy adult the change required just seven years and no more, such a standard could not serve, at best, for any but persons of similar age, sex and condition. The young must change much more rapidly, and the old much more slowly, to say nothing of those who possessed a feebler organization.

There is reason, however, for believing that no person, in adult life, undergoes an entire renovation in so little time as seven years. The soft parts, except the skin, may indeed be changed thus rapidly; but not the harder parts—the bones, cartilages, tendons, &c. Nor are we quite sure that in persons somewhat advanced in life, the more solid walls of some of the long and flat bones are readily changed. So that to say of all parts of the system, that they change once in seven years, or even in ten years, is manifestly incorrect.

Some have said that there is not a particle in the body of an old man which has not been changed a thousand times over. But this also can hardly be proved; and we see not how it can be very well believed. Some particles may indeed have been changed many more times than this; but others, there is reason to believe, have never been changed a hundred times. We know what is said of the change of solid bone in an adult, as proved by experiments with madder and other coloring matters; but we do not regard these experiments as quite conclusive.

Nevertheless, that we are continually changing; that we are never twice the same, even in the same hour or minute; and that most of the soft parts of the body are wholly changed several times a year in infancy, as well as every few years in advanced life, we have not the slightest doubt. The great world is changing continually—its rivers and its oceans—to say nothing of its more solid parts; why should there not be corresponding changes in the lesser or miniature world? And as the more fluid parts of the greater world are entirely changed several times a year, or even many times a month, why should not the more fluid parts of the animal system be changed almost as frequently? Nay, why should not the viscera in the cavities, made up as it were of masses of fluids—the brain, lungs, liver, heart, &c.—be formed anew several times a year?

Is it asked—What are the practical benefits to be derived from the knowledge that such a doctrine exists, provided it can be established? We answer: They are numerous; but were there only one, it were worth millions, especially to the young, who have their lives before them. This thought brings us to the practical part of our subject.

If we are continually changing, it is certainly desirable that this change should be for the better. Is it in our power to secure this point, that it shall be? Can we do any thing which shall render it certain, or even probable, that the new particles which are to-morrow to supply the place of those which are wasting by attrition to-day, shall be of a better character?

One thing is undeniably certain, that worse particles may take the place of those which were better. The skin, the muscles, and even the bones, may and do become less firm under certain circumstances, than they were before. The parenchyma, too, of the deeply seated organs, as there is the best possible reason for believing, may deteriorate. Now it were passing strange if all parts of the system could be made to grow worse, and yet at the same time could not be improved, provided a proper course were taken. We do not believe any such want of susceptibility to improvement exists, but that, on the contrary, the very power of deterioration, as a general rule, implies the power of improvement. It is so in morals, why should it not be so in physical matters? Young says,

> "A nature rational, implies the power
> Of being blest or wretched, as we please;"

and in the same connection or elsewhere—for we forget which—he more than intimates that great capacity of being wretched, implies great capacity of being blest.

Admit this, however—admit that we have the power of controlling the process of physical renovation, as we have, under God, that of moral renovation, still a question remains—What are the appropriate means, or in what consists the process? Suppose our muscles to be soft and flaccid, and that this flaccidity is not wholly owing to want of due exercise, but partly also to want of firmness in the muscular fibre itself, what shall be done?

A full answer to this question would require a presentation, in detail, of all the laws and relations of the human system. Let it be sufficient to say, that all these laws must be faithfully obeyed; that digestion, assimilation, nutrition, innervation, respiration, and every thing else which it belongs to the healthy system of the healthy individual to perform, must be performed in the best possible manner. It is not sufficient that we so eat, drink, sleep, exercise, think, &c., as will barely afford exemption from pain;—we must so live as will most *promote health*, as well as *save us from actual sickness.*

Let but the laws of health, throughout, be obeyed—not for one day or one week, or one year even, but for many years, and for life—and it cannot be otherwise, than that enfeebled organs, if not so far diseased as to be past recall, will be improved. As surely as digestion and all the rest of the functions are performed better, just so surely will the results or products of digestion, &c., be more perfect. The new particles will be better than the old ones; they will be, as it were, applied and cemented in a better manner; and a firmer and better fabric will gradually rise. It must be so, from the nature of the case.

Here then is the highest encouragement to improve, at every age, our physical condition. For if nothing in this respect is lost; if every step we take in the way of physical improvement really renovates our deteriorated organs, who has not motive enough to impel him to right action? Or if motive were even wanting, in regard to himself, who would not be glad to renovate his system for the benefit—by example or otherwise—of those who are to come after him? Who would leave, as his legacy to coming generations, a gouty frame, or half-consumed lungs, when it was in his power to be the instrument of handing down to them organs comparatively perfect? Who, indeed, that bears the name of Christian, or even of civilized man, would, in view of a judgment to come, dare to do it?

TREATMENT OF THE CONSUMPTION.

In a country like our own, especially the portion of it usually denominated New England, one sixth of whose inhabitants die of consumption, it can hardly be otherwise than that some of the readers of a work like this should be found predisposed to this fatal malady. Such may be glad to find, for once, a few remarks on its general treatment.*—We speak here, of course, of its treatment in the incipient or forming stage, because this is the most hopeful period. It is here, if any where, that the progress of the disease is arrested, and a respite given to the patient of ten, twenty, thirty, or, in some instances, forty years.

The treatment to which we refer is wholly preventive.

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* "How to Prevent Consumption," is the title of a Tract, borrowed from the pages of the Library of Health several years ago; but as many of our present readers have not seen it, and as it says little about "treatment" of any sort, properly so called, we have thought a brief article on treatment would not be unwelcome.

The great object to be kept in view, is to support the patient on a diet which while it is sufficiently nourishing to keep his fever fully off, will at the same time cause the least possible irritation to the already inflamed, or at least highly irritable diseased parts or organs; and to have a due regard to air, temperature, and mental and bodily exercise.

The diet, says Dr. Good, should be of the lightest kinds, and in very small proportion, or with long intervals of rest. The Moorish physicians, according to Orban, a French writer, keep their consumptive patients on nothing but a little vermicella, or millet, boiled and slightly seasoned with oil and salt; and of this only two meals in twenty-four hours. Indeed, from the time of the best days of the Greeks to our own day, physicians have concurred in recommending food in small quantity, as well as of the lightest materials.

Modern physicians generally say that the food of the consumptive should consist principally, if not entirely of milk and farinaceous vegetables. There has indeed been a long discussion about the kind of milk. Mares' and asses' milk has usually been considered the best; but cows' milk, diluted by one fourth or one third water, and perhaps a little sweetened, will answer a very good purpose.

Of farinaceous substances, arrowroot, tapioca, sago, rice and wheat are the best; and next to these, the potato in small quantity, with rye, barley and corn. Corn, however, in any considerable quantity, would be rather too stimulating. Next in importance to milk and the farinacea, are the sub-acid fruits.

We have said that next to milk and the farinacea, rye, barley and potatoes are the best food. Some authors, however, substitute for these the vegetable and animal mucilages, particularly the former. The Iceland liverwort is most used for this purpose, as it is supposed to combine with its nutritive properties a tendency to give tone and strength to the general constitution.

"In supporting or recruiting the strength," says Dr. Good, "a due attention to air and exercise is also of high importance. The advantages offered by the first are those of a mild, dry and equable atmosphere; and probably these are the whole. If the patient's own country gives him these, he need not wander from home. If it does not, he must create an artificial atmosphere in his own chamber, or set of chambers, by keeping the thermometer at from 60 to 65 degrees of Fahrenheit, and confining himself to this temperature; or he must seek the atmosphere he stands in need of in a foreign climate. The disadvantage of the former is, that though he may support the requisite temperature, he cannot conveniently obtain a sufficient change of air, nor so well avail himself of the various exercises that might be useful to him, as if he were at liberty to go abroad. Generally speaking, a change of climate or of local situation has been determined upon too late; and hence has not been attended with all the benefit that might otherwise have been reasonably hoped for."

We have less confidence than most men in a change of climate in this disease, even when undertaken early; nevertheless it has certainly been the means of cure in a few instances. The art of ventilating our rooms is now so far understood, that with all its disadvantages, an artificial climate at home, will be preferable to the inconveniences and sufferings of a residence in a foreign country. This arrangement, combined with suitable exercise for winter, and abundant exercise in the open air in summer, with a mild and bland diet, the cold bath when it can be borne, a cheerful temper, and the most perfect government of all the appetites and passions, will afford the best prospect of escaping the disease, or at least of deferring a fatal termination.

In alluding to the government of the appetites and passions, we would have said more, but we scarcely know *what* to say. No persons are more apt to be fond of exciting food, drink, &c., than the consumptive; and yet none except the scrofulous, (and scrofula is nearly related to consumption,) are so much injured by them. Parents should know this, in the physical education of their households; and not only *know* it, but reduce it to practice.

Thousands are destroyed by this grand destroyer, every year, who, had they possessed but a little more of that disposition which every true Christian possesses—a disposition to keep the body under—might have lived on, some of them ten, some twenty, some thirty or forty years longer, to enjoy life themselves, and increase its value in those around them. How much it is to be regretted that we have not more Christianity among us! How much to be desired that all men, but especially the consumptive, would deny themselves all ungodliness and every worldly lust! Such a denial would be as important to their happiness in this life, as it is to their well being in the life to come.

INTESTINAL GASES.

Few persons are aware of the deleterious tendency of gases in the intestines, especially that which is most frequently found there—viz. sulphuretted hydrogen.

"This gas," says Dr. Dunglison, in his Elements of Hygiene, "is extremely deleterious. When respired in a pure state, it kills instantly; and its deadly agency is rapidly excited when put in contact with any of the tissues of the body—*through which it penetrates with astonishing rapidity.* Even when mixed with a portion of common or atmospheric air, it has proved immediately destructive."

According to the French chemists, Dupuytren and Thenard, air containing a thousandth part sulphuretted hydrogen, will kill birds almost instantly; and that which contains a fiftieth part, horses. Dr. Paris refers to a chemist of his acquaintance, who suddenly lost his senses while standing over a pneumatic trough in which he was collecting some of this gas. It has also been a frequent cause of destruction to night men, in their labor of cleansing privies or vaults in our cities.

Even when breathed in a very diluted state, it produces sedative effects, as they are called; and when inhaled for some time, the person becomes greatly enfeebled and stupified, and sometimes almost senseless; the pulse in the mean time almost ceasing to beat.*

It is by no means improbable that much of the languor and nervous depression which accompany many complaints of the stomach and bowels—we mean, of course, when flatulence is present—have their origin in the source here alluded to. It is impossible that a poison so subtile as to penetrate, with such readiness, all the tissues of the body, should fail, when in contact with the tender lining membrane of the first passages, to produce serious results.

Tissot says of fruits—"When badly digested, they ferment in the stomach and intestines, and this fermentation generates an immense quantity of air, which produces enormous distention; and this absolutely deranges the course of circulation. I have seen this effect very great in a female, in whom, on eating too freely of ripe fruit, twenty-four hours after a fortunate confinement, the abdomen became tense and livid. She swooned, and her pulse became almost imperceptible. Fruits also leave an acid principle, which may cause severe symptoms. Crude pot-herbs, vinegar and verjuce are attended with the same inconvenience, and deserve to be excluded." He also complains, in the same connection, of fat and pastry, and of cabbages, beans, and other crude vegetables.

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* Some or all of the above facts concerning sulphuretted hydrogen, were presented in the "Library of Health," four years ago, as well as in a tract entitled "Breathing Bad Air." But we need not apologize for their re-insertion.

With proper deference, however, to so high an authority, we cannot help observing, that all the symptoms which Tissot refers to fermentation and an acid principle, may be and probably are aggravated by the gases which are produced by fermentation, especially the sulphuretted hydrogen. We have little belief in the presence of any peculiar acid principle which has much effect. In truth, we should not be greatly surprised to know that a greater share of the trouble in these cases results from the gas. It is not possible it should be otherwise with an agent so penetrating and so poisonous.

How careful, then, ought we to be in the physical education of the young, lest they become gaseous; and above all, lest they should acquire that odious—we might say abominable—*habit* of being gaseous. For it is well known that some persons indulge themselves in being gaseous, and make a sort of merit of it. They even suppose that the power to eject the gas with violence, is one of the more certain indications of high health.

We will not say that this error, in all its length and breadth, is universal—we know better. But there is not correct knowledge on the subject every where; and many more persons know that the expulsion of air from the bowels or the stomach is vulgar and clownish, than that this same air is a most terrible poison. It matters not whether it is expelled in one direction or another.

But is it not better that a gas so poisonous should be expelled, we shall be asked, than that it should remain? It may be so; or it may be otherwise. The more we indulge in its expulsion, the more it accumulates; and the contrary. Besides, it should not be forgotten by him who loves his neighbor as himself, that it is as much a crime to poison a neighbor with gas, as with a poison more tangible.

It ought to be known, however, that in avoiding one error, we are ever in danger of embracing its opposite. They who in the education of a healthy child should reject all sorts of food and drinks that, in the feeble, would produce flatulence, and only feed with pap, biscuit, arrowroot or rice, will never educate the stomach they are so careful of, to the highest possible degree of perfection.

The stomach is muscular, as much as the heart or arm; and to be trained perfectly, needs to be tasked to the utmost of its healthy capabilities as much as any other part or organ which is muscular. But this training should be gradual. Feed a child of two years old, however healthy, with potatoes and crude vegetables and fruits, and it is ten to one but you make him constitutionally gaseous, if nothing worse. But by the gradual use of potatoes and fruits, at seven or eight or ten years of age, not only will flatulence be avoided, for the time, but the susceptibility to flatulence in later life will be greatly diminished.

One thing remains to be said. There is a period beyond which the solid contents of the bowels of the most healthy person should not remain unexpelled; for if they do, they come in part under the chemical law of decomposition, one product of which is this same sulphuretted hydrogen. Besides, these solid contents themselves, if they remain too long, may be absorbed; and who would wish to have a putrid substance carried through all parts of the system to add its poison to the gaseous agencies already at work? Constipation, therefore, is of evil tendency, in this respect, no less than flatulence and diarrhœa.

But turn which way we will, and if our eyes are open, we see the necessity of understanding, especially as parents, the laws of health and life. How great—might we not say how awful—our responsibilities! We are indeed fearfully and wonderfully made; and considering our errors, not less fearfully and wonderfully preserved.

USE OF SALERATUS.

Something was said in our last number of the use of saleratus or pearlash in food, but our remarks were so brief as barely to elicit inquiry on the subject; and we propose to satisfy, if possible, the curiosity which has been raised, by a more extended article.

When dough of any kind is over-raised, and the acetic acid generated, the application of the vegetable alkali, (i. e. of either saleratus or pearlash,) in suitable measure, by combining with the acid, tends to correct the acidity; or, as house-keepers say, *sweetens* it. But even in this case, it is very questionable whether the acid which exists in the mass is more injurious than the salts which are formed by the new play of chemical affinities; such as acetate of soda, carbonate of soda, and the like. Admitting, however, it were so, this is almost or quite the only case in which the use of saleratus or pearlash in our food can be justified. Even here, it were better, far, to prevent the necessity of its use, by baking the mass before the fermentation has proceeded so far as to cause the acetic acid to be evolved.

The use of alkali, we say therefore, in such measure as to neutralize the acid which is present, is the only use of the article which is justifiable. Any excess of it in our food is highly pernicious to the lining membrane of the whole alimentary canal; but especially to that of the stomach. We do not mean by this that it corrodes or gnaws living membranes, as it always does those whose life is extinct, but only that there is a *tendency* to attack these parts. There are irritation and heat, and it may be eruptions. A foe is present, and the presiding power of the system—the *vis medicatrix* as some call this power—makes an effort greater or less strong, according to the general bodily energy, to oppose or expel it. If the individual is of firm, robust general habits, and in high health, and especially if he is young, the effort is successful, and the foe is kept as it were at a distance. The alkali, indeed, will be taken up by the absorbents and carried the round of the circulation; but it will every where prove a source of irritation and disturbance, and its presence will, at the least, induce a feverish state of the whole system.

Whatever we receive into the human stomach should be adapted to the *condition* of the stomach. The proof of this adaptation, in a given substance, is found in the quiet with which the system, generally, receives it. Not the quiet of the stomach alone, for it is wisely ordered that the stomach should not make its reports so *directly* to the brain as some other organs, but that of the heart, and the arteries, and the brain and nerves. If the arterial action is increased, we may be sure there is a degree of irritation. If the same action is diminished, it is obvious that by some means or other, the nervous energy is depressed.

It was once supposed, even by physiologists themselves, that every meal should be followed by a slight increase of action in the heart and arteries; and this was called gastric fever. But if food is taken in proper circumstances as respects the condition of the individual who receives it, and as to both quantity and quality, no gastric fever will follow it.

Among the substances which increase or accelerate the action of the heart and arteries, are the condiments, as they are usually called, especially all spices, together with many crude, indigestible or highly-concentrated substances, as pickles, preserves, confectionary, &c. Among those which depress—stupify, as it were—are coffee and saleratus or pearlash.

The use of this last mentioned article is, without doubt, greatly increasing throughout our country. Many a house-keeper appears to think she cannot have cakes, or even good bread, without saleratus. Nothing is more common than to buy, for family use, a bucket of it to a barrel of flour. We have conversed very lately with several intelligent house-keepers, whose united testimony is, that twelve pounds are only a very moderate quantity of this article for a family of five persons for one year.

We would not be fastidious, but we would gladly be a means of warning the world against these petty, yet dangerous errors. We might even talk, in this connection, of domestic economy. We might speak of the great waste involved even in the use of twelve pounds of an irritating substance annually. At two dollars a year, it is one hundred dollars in fifty years. Such a sum might be better applied than in doing mischief.

SUPPERS AND SLEEP.

"Suppers," says Dr. Ritter, of Germany, "are by no means necessary, and it is better to omit them entirely. Agreeable recreation in the evening, is much more essential than the third meal. Public houses are not, however, the proper places for recreation or amusement. If we cannot spend the evening pleasantly in the domestic circle or among our friends, it will be well to visit concerts, lectures, and other amusements which are innocent and useful.

"If, however, an individual should feel as if it were impossible to abstain from supper, let him at least take his supper very early. Nothing is more injurious, and nothing is more likely to excite lascivious dreams, than going to bed with a full or an overloaded stomach."

Some of this advice should be received with great caution. The air of rooms in which evening concerts and lectures are held, to say nothing of their too high temperature, and the mental excitement which they occasion, is by no means favorable. All these things ought if possible to be avoided. The pleasures of the domestic circle, or the circle of a few friends, are far better.—What supper is eaten should, at all events, be light and dry.

"We ought to retire for rest," he says, "at 10 o'clock; and to sleep on a mattrass, instead of a feather bed. The sleeping room should be neither too warm nor too cold; and the body, and especially any debilitated organs, must be covered in a light and cool manner, and not exposed to compression. Children should accustom themselves to keep their hands, during sleep, outside of the clothing, for reasons which must be obvious. The contents of the bladder should be carefully rejected before retiring, and the outlets of the system should be thoroughly washed with cold water. The feeble on going to bed should take a tumbler of cold spring water."

We cannot say with certainty in regard to the tumbler of cold water on going to bed; though even this may be useful. But in general this advice of our German friend is excellent, and deserves to be remembered and regarded.

FATHER SEWALL.

We had, long ago, heard of "Father Sewall," now of Frankfort, Me.; but never till a few weeks since did we enjoy the pleasure of seeing him. Being at Bangor at a public meeting, we lifted up our eyes and discovered moving slowly along, a man of giant size, and of venerable appearance, but yet of the greenest and healthiest old age. There was no mistake concerning him. It was Rev. Jotham Sewall, a man 83 years of age; one of the fathers of the state.

On conversing with this venerable old man and with his friends, we were surprised to learn that he had been an ultra-temperance man for almost half a century. "As for coffee and tea—poisonous things that they are," said he—"I have not used either of them for forty-one years." His only drinks are water and sage tea; unless indeed he makes use of milk as a drink. The latter, with bread and fruits, constitutes his principal diet. He never makes any use of flesh or fish or butter; or, we believe, of any condiments except salt. He is, moreover, an early riser, and a man of cheerful temper.

His case is the more interesting, because of all the older ministers in Maine, he is well known to be most remarkable for his abundant labors in the gospel. He has been, for half a century, indefatigably devoted to the public good, and has exerted himself ardently, in season and out of season, in prosperity and in adversity, to spread the glad tidings of the kingdom of God. He is almost constantly travelling as a home missionary in Maine; and if any one needs what are commonly called the indulgencies of life, especially at an advanced age, it is Father Sewall. Yet no man, it may be boldly affirmed—no minister, at least—has been more sparing in their use.

And he has his reward, in such an old age as the mass of mankind know nothing of, and in the security that he shall go down to the grave in peace, instead of being torn from life by violence, as by apoplexy, palsy, or some of the other ministers of God's displeasure against those who do not, in body and spirit both, consent to glorify him.

One thing more. In view of such facts as this—for the case of Father Sewall stands not alone—is it not strange that the world should seem determined to cling, as with a death grasp, to the idea that a diet exclusively vegetable, with water as a drink, is not sufficient for the hard laborer, in body or mind? No person in the world can doubt for a moment, the superior mental or bodily strength of Mr. Sewall. He is a very giant in both respects, and commands attention and respect wherever he goes. We do not mean that he is a giant in the same sense in which Newton or Cuvier was, for he has not enjoyed their advantages; but only that in native energy of mental faculties, and in what Locke calls plain "round about sense," he stands pre-eminently high.

If people will continue to eat flesh and fish, let them assign the true reason, namely, because they are fond of it; and let us not hear so much about vegetable food being insufficient to give strength. We are tired of so lame an apology.

THE HYDRO-MEDICANT.

Let not the reader startle at the occasional introduction of hard names into a work where he is accustomed to find, for the most part, plain English, not to say "mother Saxon." The term *hydro-medicant*, is from certain Greek words, signifying the application of remedies with moisture; and is used, in the present instance, to distinguish a newly invented vapor bathing apparatus—by Dr. M. Mattson of this city.

It is more than three months since we heard of this apparatus, and were importuned by friends to examine it. It was not, however, till within a few weeks that we were able to comply with their requests. We are now satisfied of its excellence, and prepared to recommend its use to all who can afford it—(the cost will not probably exceed twenty-five dollars)—not indeed in the administration of the *hydro-medicated bath*, as medical men call it, and for which it is also designed—for of this we know very little—but in that of the common or Russian vapor bath.

The hydro-medicant is in every respect *portable;* the whole apparatus, tent and all, scarcely weighing 20 pounds. So light in fact is it, that Dr. Mattson sometimes employs a mere boy to carry it to different parts of the city, where it may be desirable to administer a bath to a patient at his bedside. When packed, it makes a box two feet long, fifteen inches wide, and eight inches deep. Of course, when not wanted for use, it may be set away in a closet, or corner of the house; or it may conveniently make a part of the luggage in travelling; and the owner may quietly enjoy the luxury of a bath, without going out of the apartment of his hotel or boarding house.

The tent in which the patient takes his seat, is so constructed that it may be erected in a few minutes; and being a handsome piece of furniture, it would do no discredit to one of our fashionable parlors. The most important part of the apparatus, however, is a light and portable furnace and spirit lamp, which is a portion of the invention, and by which the temperature in the tent could be raised—were it necessary to elevate it so much—to 120 degrees. The cost of the spirit employed is trifling, and even less than would have to be paid for wood in one of our principal cities. Not more than seven or eight minutes are employed in boiling the water and raising the temperature in the tent sufficiently for the reception of the patient.

By means of the spirit lamp, the temperature of the bath can be regulated with the utmost nicety; and as no safety valve and stop-cock are employed, there is no danger of accident, even in inexperienced hands. Besides, no more vapor is generated than is just necessary for the bath, so that the apartment generally is not rendered damp or uncomfortable.

Another feature of this newly invented apparatus is, that it enables an individual to take a bath without an assistant; and he can himself regulate the temperature of the tent with as much precision as though an assistant were employed for this sole purpose. Dr. Mattson is in the habit of taking a hydro-medicated bath occasionally in his sleeping apartment, solitary and alone, just before retiring to bed.

In a letter of Dr. M., written in reply to some of our inquiries on this important subject, and in particular with reference to the newly invented apparatus, he says:

"It may not be improper to state, that I have been several years in bringing this apparatus to its present degree of perfection. I say *perfection*, because I am not aware that it can be any farther improved. I made several unsuccessful attempts before I procured a tent that was light, neat, strong and portable, and which could be put up or taken down with ease and facility. But the greatest difficulty was in constructing a furnace and spirit lamp by which I could elevate the temperature of the bath sufficiently high. In this, however, I have succeeded; and I mention it particularly, because doubts have been frequently expressed, whether the heat produced by a spirit lamp placed outside of the tent, could be so economized as to produce a bath of sufficiently high temperature."

We understand that in a few months, at farthest, the hydro-medicant will be ready for delivery to purchasers. At present the inventor is preparing a treatise to accompany it, and to serve as a guide in the hands of the ignorant, the doubtful, or the apprehensive.

CHAPTER OF INTELLIGENCE.

Nature can do her own Work.—Conversing the other day with a minister of the gospel, from Pownal, Me., we were not a little surprised to find him decidedly opposed to the use of medicine, except at the prescription of the physician. "We trust all to nature," said he; "and we always find her competent to the management of her own work. My wife and I have been importuned, railed at, and laughed at, because we would not resort to dosing, in the little complaints of our children; but neither ridicule nor entreaty has thus far had much influence. We do not even keep medicine in the house. Some time ago we did indeed keep a little camphor; but of late even this article has been turned out of the house. We believe it is with dosing and drugging as with drinking spirits—that it is easy to begin with it, but not easy to break up the habit."

The Shower Bath.—Somebody, we know not whom, has proposed the construction of a shower bath, by elevating a small quantity of water—say two or three quarts—on the principle of atmospheric pressure, and then, at our pleasure, removing the pressure and letting it fall upon us, through a sieve-like surface. It is said that a suitable apparatus for this purpose, made of tin, costs only about a dollar and fifty cents.

But there are a thousand ways of preparing a shower bath, were it believed by the community to be useful. A vessel of water placed over the head in a basket, with a string attached to it, may be easily overturned. Or a bucket or pail of water suspended by a rope near the ceiling, may have a hole in the bottom, stopped by a cork, to which a string is attached, on pulling which the water in the bucket may be emptied into a tin bason pierced with holes.

Seats at School.—In the public school conduced by Mr. Littlefield, at Bangor, Me.—a school of about one hundred females—each pupil is furnished with a chair of such a construction, that the back and seat revolve, while the basis or bottom of the chair is immovable. The *convenience* of seats of this description must be obvious to every one; saying nothing of the tendency to health from having backs to the seats.

And yet, in the same city of Bangor, is another school of fifty girls, much younger than the former, who have hitherto been compelled to sit on a sort of stool, without a back, and to whom the city authorities have hitherto refused even this little indulgence. True, a vote was passed some few weeks ago, after a long struggle, in the board of aldermen, to appropriate a small sum for the purpose in question, but the other department of the city government refused to concur.

Now if these young female pupils could go out into the open air every ten or fifteen minutes, and play awhile, we would not object to seats without backs; but if they must sit from one to three hours without exercise, we shall continue to enter our protest against it, and to talk of the sufferings in which the whole maternal system is likely to be involved as the consequence.

Unripe Fruits.—They who would have their children troubled with summer and autumnal complaints, should be sure to let them eat, beforehand, an abundance of crude substances and unripe fruits. For all children who are over two or three years of age, ripe and perfect fruit, used in moderation, is a preventive; but let us not be in too great haste about eating it. The later and more perfect fruits of each shrub or tree, are preferable to those which are hurried forward by having a worm at their centre or core; and so are the later varieties of each particular kind. The later varieties of strawberry, for example, are preferable to the more early ones; and this remark is still more applicable to the larger fruits, as pears and apples. The philosopher Locke—who by the way was a medical man—in his work on Physical Education, observes—"I never knew apples hurt any body after October."

The Use of Tobacco.—We have in preparation, to be shortly published, a tract on the Use of Tobacco, in chewing, smoking and snuffing. There are one or two essays abroad on this subject; but we cannot *help* believing ours is by far more complete than any thing of the kind which has before appeared.

TEACHER OF HEALTH.

SEPTEMBER, 1843.

OUR BODILY APPETITES.

We have no doubt that the Creator kindly connected, or designed to connect, our duty and our happiness. We have no more doubt that he meant to connect enjoyment with the gratification of our appetites, than we have of our existence. But the connection extends no farther than the point at which these appetites cease to be gratified in accordance with his will. In other words, if he who made us designed that we should be nourished and our race perpetuated in a certain manner, our happiness, so far as the gratification of our appetites is concerned, will always be in exact proportion to our conformity or non-conformity to his arrangements with reference to the manner or mode which he has assigned.

What this manner or mode may be, we are, for the most part, compelled to learn by experience, or by studying the frame-work and laws of our bodies themselves. The revealed law of God only assures us, in general, that we are to deny ourselves daily, to keep our bodies under, &c. The *measure* or *extent* of self-denial necessary, we are left to ascertain in another way.

It is common for mankind, with respect to any of these appetites, to indulge themselves as much as they may without immediate suffering. Indeed, they will often go farther in the hour of temptation, like children in view of present pleasure and a distant rod, and venture to do that which they know, full well, will cause them, at best, a *little* smarting. But the pleasure is near, the punishment, it is hoped, distant. The present is therefore seized, and the future disregarded; and when the hour of reckoning arrives, it not unfrequently happens that the old account is even forgotten.

Men would come sooner at the truth with respect to the indulgence of their appetites, if instead of asking how much they may eat, drink, &c., they would ask how little. The question *how much* falls in with, or rather originates from depraved nature; and is always answered with reference to the wants of that nature. The more it is asked, and the more answered by indulgence, the greater the departure of the appetites from the path of integrity. Whereas, were it customary to ask, as Christians should ask, *how little* may we use, there would be a continual approximation to truth.

"But would the amount of physical enjoyment be as great in the latter case as in the former?" Most undoubtedly. For since man is happy, even in this world, in proportion as his intellectual and moral nature has the ascendancy, and the animal nature is kept in subjection, it follows that a course of conduct which keeps that nature in subjection, must, on the whole, be most favorable to physical enjoyment. That cannot be most favorable, in this respect, which either leaves a sting behind it, or involves severe though distant suffering.

The truth is, that in seeking to enjoy as much as we can, the food cloys, and the appetite becomes impaired. We are not merely in the condition of the child that in endeavoring to grasp more marbles than his little hands can hold, actually obtains fewer in number than if he was less rapacious. For though in our eagerness to grasp we strangle and destroy pleasure, yet we commit a still greater error, and destroy our natural capacity for pleasure. He who asks how much may I take, will almost always take too much; while he who asks how little will suffice, always enjoys that little to the utmost extent of which his nature is capable. And more than even this is true. His capacity for enjoying mental and moral good will be ever increasing in the same proportion; while in the case of him who asks *how much*, his capacity for both will be continually diminishing.

The doctrine involved in these views will be unpalatable to those who find from what they call their own experience, that the more they indulge their appetites, the more they seem to increase. These individuals are of two classes. In the case of the first class, the increase of capacity of enjoyment is but short. Like fuel in the flame which is quickened by the bellows, it soon burns out and leaves all in cold and darkness. In the other case, activity is mistaken for strength. This is proved by the imperfection of the results. The individual is not so well nourished, nor the race so well propagated.

DR. GOOD ON DYSPEPSIA.

In treating of the very common disease called dyspepsia, Dr. Good considers its remote causes as of two kinds, local and general. The following is his statement:

"The LOCAL remote causes are a too free indulgence in sedative and diluting substances, such as tea, coffee, and warm water, or similar liquids, taken as a beverage; or an equal indulgence in stimulant and acrid materials, as ardent spirits, spices, acids, tobacco, (whether smoked or chewed,) snuff, the daily habit of distending the stomach by hard eating or drinking; or a rigid abstemiousness and very protracted periods of fasting.

"The GENERAL remote causes are an indolent or sedentary life, in which no exercise is afforded to the muscular fibres or mental faculties. Or, on the other hand, habitual exhaustion from intense study, not properly alternated with cheerful conversation; becoming a prey to the violent passions, especially those of the depressing kind, such as fear, grief, deep anxiety, and immoderate libidinous indulgence; and a life of too great muscular exertion."

In regard to the treatment, his remarks are as follows:

"The patient must, in the first place, be convinced of the necessity of putting himself under a new rule of conduct, and be deeply impressed with the idea, that though he may have continued his late plan of life for a considerable period of time without having sensibly suffered for it, yet now that he is suffering, nothing but his conforming to another plan will remove his present complaint.

"Severe and long continued study, protracted, as I have often known it, through ten hours a day, for many months, without any relaxation or interchange of pursuit, must give way to the exercise of walking or riding, and this not occasionally, but daily; and to the still better cordial of cheerful conversation. The last is of very great importance; and without it even exercise itself will be of little avail. For the mind accustomed to a certain track of intellectual labor, will otherwise, even while riding or walking, fall into the same habitual course—will be dead to the most fascinating prospects around it, and become exhausted by its own abstraction. And it is to characters of this kind, perhaps, more than to any other, that the amusements of a watering place promise success, where the general bustle and hilarity, the voluntary forgetfulness of care, the novelty of new scenery, new faces, and new family anecdotes, and the perpetual routine of engagements that fill up the time with what would otherwise be trifles and frivolities, reverse the mischievous order and monotony of the past, break the sturdy chain of habit and association, and give leisure to the worn out sensory to refresh itself."

The remark concerning the tendency of suffering the mind to pursue its old mill-horse track, during the season of exercise, together with what follows in the same connection, reminds us of one or two anecdotes which will illustrate this part of our subject.

A student in theology who had become a dyspeptic, once came to Dr. (now Prof.) Cogswell for advice. Dr. C. recommended moderate labor on the farm; which, to those who like it, or can bring themselves to like it, and can pursue it in company, is as good as riding or walking—perhaps better. The young man followed Dr. C.'s advise, but at the end of the year was no better. On inquiry, Dr. C. found that he had labored alone, and for the mere sake of laboring. Suppose, said Dr. C., you try labor another summer, and have a certain share of the avails. The young man, whose circumstances brought him within the reach of such a motive, did as he was directed, and in the course of the season found his health greatly improved.

Travelling some years since, in the month of June, with a dyspeptic, he suddenly interrupted the conversation by saying—Why will you be continually *reasoning* on something? Why not be quiet and drink in these beauties of surrounding nature? The reproof was founded in wisdom; and though we were not dyspeptic, it was followed with much benefit.

We do not say that light, cheerful conversation would not have been preferable in both these cases; but only that in order to derive benefit from exercise, some object to withdraw the mind from its old track in the one instance, was indispensable, and something to keep it away from the fatigue of perpetual ratiocination, in the other.

But to proceed with Dr. Good's plan of treatment:

"Where the same effect (viz. dyspepsia) has proceeded from a town life of fashionable follies and dissipation, nothing is more common than to recommend a like change of residence. But, in this case, though it may be a change of residence, it is not a change of life; and hence it is too often made without any benefit whatever. A total retreat from the world, the unbroken seclusion of a remote hamlet, the sober society of a few intimate friends, simple meals and early hours, instead of close and heated rooms, crowded and motley routs, costly feasts and midnight madrigals, are what are especially called for in this instance, but are not always to be met with in the resort of a watering place. In such as are still distinguished for their quiet and unfrequented shores, where all is rude and simple, and spruce squares and long drawn parades have not yet put to flight the scattered and irregular cottages of former times, the advantages may still be obtained. But it is rarely that those who are suffering from a life of dissipation, will consent to relinquish the higher attractions of our gayer and more public retreats, for what they are apt to esteem the dulness of an unfrequented coast, till it is of little importance whether they go any where or remain at their own homes."

Thousands there are among us—and of these not a few who ought to know better—who fly to "the Springs" for relief, when there is, to say the least, a far more excellent way. Better indeed that they should have *prevented* the necessity of doing any thing; but even when *cure* becomes necessary, this is not the best method. But we have one more quotation to make.

"In like manner, habitual hard eating and drinking must give way to a wholesome plainness of diet; though

I am afraid that not a little mischief has often ensued by rigidly compelling the man who is suffering from a long habit of the former, to abandon this habit, at once, and run to an extreme of abstemiousness. Nothing can be more injurious. Even in full health, the animal frame, though it may be brought to any extreme degrees, very ill brooks abrupt changes; and I have often seen where such changes have been effected in an enfeebled constitution, that they have introduced worse complaints than they have been intended to remove."

All this perhaps is true; and yet there are instances of such extreme irritability of stomach, even in those who have hitherto been full feeders, that rigid abstemiousness is the only safe method, and indeed the only successful one; as we have not only the fullest assurance by Dr. Johnson, in his work on "Indigestion," but by many other writers. Dr. G. himself relates a case, which, we think, tends to make good our assertion.

"I have a patient," says he, "who has just consulted me on an obstinate dyspeptic affection; but who is otherwise in very good general health, and was a few years ago able very readily to digest all the articles that enter into our ordinary meals, as butter, cheese, sugar, tea, malt beverage, and wine. Such, however, is the state of his stomach at this moment, and has been for some years past, that he cannot take the smallest quantity of any of these articles without serious inconvenience. He becomes oppressed, flatulent, and distressed with acidity and sickness. I am unable to learn what was the cause of this morbid change; for he has ever been a man of the greatest temperance and most regular habits.—I do not state the plan I have put him upon, as he has only just commenced it, and it must be long before its real effect can be discerned. There can be no doubt, however, that in the present condition of this gentleman's stomach, he has done wisely to change his former diet for a new one."

One thing is worthy of special notice here. It is said the patient was formerly a man of the greatest temperance, and in this view Dr. G. appears to marvel at the strange irritability of his stomach, and that he could not digest butter, cheese, sugar, tea, ale and wine. Now there is only one, or at most two of these articles that ever ought to be digested, or indeed ever were so; and two of them are actually excluded by the latest temperance pledges, while a third ought to be. Is it surprising that such a temperance man should have dyspepsia?

In giving further particulars concerning food, Dr. G. makes the following interesting, and many of them, highly pertinent remarks:

"One substantial meal of solid animal food, daily, is sufficient for a man in full health engaged in a life of ordinary labor. Yet there are many who, without any labor, are, from a long habit, obliged to use two or even three. But the habit is bad, and cannot be too soon broken through. It follows, therefore, of necessity, that where the stomach is weak, the toil of digesting one full meal of animal food is the most that should be put upon it. This should take place as nearly as may be to the hour of noon, certainly not later than one or two o'clock, so as to occupy the middle of the wakeful period. The animal food should consist of one dish only.

"The vegetable nutriment should be such as is least disposed to ferment, in the stomach; and hence all kinds of new bread, sweet preserves, confectionary and pastry must be sedulously avoided; and the crust of bread, toasted bread, and unleavened biscuits, take their place. The farinacea, whether seeds or roots, such as rice, wheat flour, in the form of light and simple pudding, and potatoes, may be allowed in moderation. Water, too, is the best beverage."

This view of dyspepsia is different, in some respects, from that of Dr. Johnson, but is exceedingly instructive. In a future number we mean to present some of the notions of Dr. J., that our readers may have an opportunity of comparing them. We write chiefly for the healthy; nevertheless there are a few diseases so common among us, that we are disposed to advert to them from time to time, especially in regard to the means of prevention.

SUPERSTITIONS.

We have spoken, from time to time, of the law of sympathy, that wondrous bond of brotherhood which connects together the various parts and organs of the human system, and so disposes of them in sickness and in health, that whether one member suffers all the members suffer with it, or whether one member is honored all the members rejoice with it. This doctrine, like all others, is of course liable to perversion; and has been sometimes strangely perverted. The following is from the writings of Dr. Dunglison:

"It was believed, almost universally, in the fifteenth century, that an intimate sympathy exists not only between parts of a body forming portions of one whole, but also between any substance that had previously formed part of a body and the body itself. That if, for example, a piece of flesh was sliced from the arm of one person, and made to unite to that of another, the grafted portion would accurately sympathize with the body of which it had previously formed part, and undergo decay and death along with it; and it was even proposed to turn this sympathy to account. It was recommended, for instance, that the alphabet should be traced on the ingrafted portion; and it was affirmed that when any of the letters so traced were touched, the party from whom the piece of flesh had been taken, would feel similar impressions, so that, in this manner, a correspondence might be maintained.

Some went even further than this, asserting that such a miraculous sympathy exists between the human body and all that has previously formed part of it, that if we were to run a red hot iron into the excrement of any person, he would feel a sensation of burning in the part whence it had proceeded.

It was also a notion that grafts united to another body die when the person dies from whom they have been taken. In a recent work on animal magnetism, the case of a man of Brussels is given, who had an artificial nose, formed after the old Talicotian method,* which served every useful purpose, until the person from whom the graft had been taken died, when it suddenly became cold and lurid, and finally fell off. Taliacozzi himself lived in an era of superstition, when this belief in the synchronous death of the parent and graft was universally credited, and the folly has not escaped the notice of Butler:

> ‘So learned Taliacotius from
> The brawny part of porter's bum,
> Cut supplemental noses, which
> Would last as long as parent breech;
> But when the date of nock was out,
> Off dropt the sympathetic snout.’

Little less singular was the superstition that the wounds of a murdered person will bleed afresh if the body be touched ever so lightly in any part by the murderer. This idea gave rise to the trial by *bier-right*, which has been worked up by Sir Walter Scott with so much dramatic skill, in one of his novels—*St. Valentine's Day, or the Fair Maid of Perth.* The annals of judicial inquiry furnish us with many instances of this gross superstition, which still exists among the lower orders in some parts of Great Britain, and probably also among the credulous and uninformed of this country.

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* This consisted in cutting away the remnant of nose till it became like the surface of a fresh wound; then a piece of skin from the forehead, arm, or some other part, of a suitable shape, was detached except at a single point, and applied to the nose by its bleeding surface; and when united by what surgeons call the first intention, the remaining point of union to the part whence it was taken was broken up, and a nose was formed. This operation is occasionally performed, even in our own day.

In the year 1688, a gentleman of the name of Stansfield was tried at Edinburgh for the murder of his own father, and found guilty. Having strangled him, he caused the body to be thrown into the water, to have it supposed that the death had been by suicide. The appearances about the corpse, however, were such, that both the faculty of physic and that of surgery gave it as their opinion that the deceased had been strangled, and not drowned. The indictment in the case, among other things, remarked—'That upon the — day of November last, the said Sir James Stansfield coming from Edinburgh to his house at New Milns, and going into his chamber to rest about ten o'clock at night, and being alone in the room, under the credit, trust and assurance of the said Philip his son, and his own servants within his family; the said Philip did consult with one George Tomson and divers other persons how to murder him, and that accordingly they did murder and strangle him in his bed-chamber, and in the dead of night carried him from the said room and threw him into a pond near the house. That the next morning when the body was found, the said Philip caused it to be buried in haste, and refused to stay till his friends and physicians viewed it. That the body being taken up again by authority, and inspected by surgeons, it appeared to have been strangled and not drowned; and that his nearest relations being required to lift the corpse into the coffin after it had been inspected, upon the said Philip Stansfield touching of it, (according to God's usual method of discovering murder, says the framer of the indictment,) it bled afresh upon the said Philip, and that thereupon he let the body fall, and fled from it in the greatest consternation, crying Lord have mercy upon me! And that the said Philip being found by an assize to be actorant and part of the aforesaid crimes, one or the other of them, he ought to be punished,' &c. &c.

On this portion of the indictment the king's advocate remarked—That as to the body bleeding, although several persons touched it, none of their hands were besmeared with blood but the prisoner's, and that the body having lain two days in the grave, in a cold season, the blood must naturally be congealed. That the lifting about the body, and even the incision that was made, causing no such affusion before, but only of some water or gore, and should upon the prisoner's first touching it begin to bleed afresh! he must ascribe it to the wonderful providence of God, who in this manner discovers murder, especially since no natural reason could be assigned for it; and that the horrible impressions it made on the prisoner, notwithstanding his resolution to the contrary, might be urged as another argument of his guilt.

A case of a similar kind is given in the Annual Register for 1767, as having occurred in our own country. It is contained in the attestation of John Demarest, coroner of Bergen county, New Jersey.—The superstition, too, is noticed by many of our older poets. Thus Shakspeare, in his Richard III:

> 'Oh, gentlemen, see, see! dead Henry's wounds
> Open their congealed mouths and bleed afresh!
> Blush, blush, thou lump of foul deformity;
> For 't is thy presence that exhales this blood.'

And Webster, in his tragedy of Appius and Virginia, published about the middle of the seventeenth century:

> 'See
> Her wounds still bleeding at the horrid presence
> Of yon stern murderer, till she find revenge.' "

It is almost needless to say, that all these superstitions are now on the wane—certainly so far as our own United States are concerned. It is nevertheless true that so long as any of them exist, they are worthy of our notice, that we may be warned to avoid a rock on which so many have already split, and on which, without timely caution, many, very many more will be likely to make shipwreck.

SOURCES OF COSTIVENESS.

One fruitful source of inconvenience—not to say of troublesome and dangerous diseases—in the people of every age and condition, is constipation, or costiveness.—The following article on the Causes of Constipation, is extracted from the "Mother's Medical Guide"—a recent work of ours, which few of the readers of the Teacher of Health have probably seen. Though written for the special benefit of mothers in the management of their children, it is almost equally useful to adults in the management of themselves. No apology, therefore, is necessary for the liberty we have taken of inserting it.

"The first accidental cause of costiveness which I shall mention, is the use of boiled milk. It is well known that children 'brought up by hand,' as it is called, are more subject to deranged digestion, costiveness, and relaxation, than those brought up at the breast. They are especially so when they use much boiled milk. The parent, then, who has a costive child, and is desirous of tracing out the causes of its costiveness, should first look well to its diet.

But it is not boiled milk alone that will produce costiveness. Rice and fine flour bread will have the same effect, if used too freely and too long. Not that either of these—nor even boiled milk itself—can have a directly astringent or constipating tendency. The effect which they produce is *indirect*, rather than *direct*. The fault with them is not so much that they act wrong, in any way, as that they do not act at all; at least with sufficient energy to produce the desired results.

Medicine is the second accidental source of costiveness on which I shall dwell. If mothers were half as ready to search out and remove the causes of their children's complaints, as they are to send for a physician in every case of petty indisposition, it would be far better for their constitutions in after life, as well as save them much expense for medicine and attendance in the earlier years of infancy. For though I cannot have either part or lot in that general prejudice against medical men, which says they will induce or prolong disease for the sake of the emolument,* yet there cannot be a doubt that costiveness is often the result of an improper use of active medicine, whether administered by parents themselves, or by physicians. It is painful, exceedingly so, to observe how frequently a mother will rejoice in the success of a prescription, when her very success paves the way to disease in some other form.

But it is less my object to complain, here, of the tendency of medicine which is unnecessarily employed by medical men, (for what can we do when we send for them—I mean with safety—but follow out their prescriptions?) than of the danger of parental dosing and drugging, especially with elixir paregoric and laudanum. I know of no one who has complained with more bitterness, or with more justice, of the use of the latter medicine, than Dr. Dewees.'

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* Such villany, no doubt, has been practised; but it is wrong to charge it on the profession generally.

'Nurses,' says he, 'are now so familiar with this drug, that it is as regularly carried about with them as their scissors or thimble, and is much more indispensable to their comfort than either of these emblems of industry. If the child do not go to sleep, or if it be even feared that it will not at the exact moment which will suit the arrangements of the nurse,—or if it cry from any cause, so as to give additional trouble,—laudanum is given, to make 'assurance doubly sure.' The consequence is, that an accidental is converted into an habitual costiveness; or the child may fall a sacrifice to convulsions, or other fatal diseases, before this disposition of the bowels may be changed.'

I do not think simple laudanum is so often given among us as elixir paregoric, or some other mixture.* I have seen a child eight months old attacked with epileptic fits, and almost destroyed by them, when the only cause which could be discovered—and was not this sufficient?—was the use, twice a day, of a mixture of thirty drops of laudanum with the same quantity of spirits of lavender.

It is true that I have seen a multitude of others—children, no doubt, who inherited remarkably strong constitutions—whose mothers gave them elixir paregoric to keep them quiet, so that they themselves could work; and this without any perceptible ill effects, except costiveness: this, I believe, is always induced in a degree. Costiveness is less frequent, however, as well as less severe, than might be expected, did we remember how universally opium, in *some* of its forms, is administered.

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* I do not, here, undertake to deny that it is very often given, even among us. You can hardly travel a day on a railroad or canal, or in a stage-coach or steamboat, without meeting with more or fewer mothers and infants with laudanum bottles.

But, thirdly, 'costiveness is induced,' says Dr. Buchan, 'by keeping the body too warm, and by every thing that promotes the perspiration; as wearing flannel, lying too long in bed,' &c. If this is so—and I have not a doubt of it *—how careful ought mothers to be to watch against excess of heat in any of its forms! And they are called upon to watch against it with the more care on account of the great difficulty, at this tender age, of steering clear of extremes.

Infants have not the power of resisting either heat or cold as well as adults. Once heated, they seem hotter, and once cooled, colder. Mothers ought to understand this fully, in order to prevent the error of allowing them, on the one hand, to be over-heated, and, on the other, to be chilly or cold. Especially should they avoid the extreme of too much warmth; because this is an extreme against which they have not been accustomed to guard; and because it tends so certainly to costiveness, as well as a thousand other evils.

In the fourth place, too intense mental activity, in the young or the old, may induce or increase costiveness, or its opposite. Hence one reason why children whose powers of digestion are comparatively feeble should not be sent to school;* or, if taken with derangement of the digestive organs while at school, should, as soon as possible, be withdrawn.

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* The skin, and lining membrane of the intestines, are said, by physiologists, to *sympathize* strongly with each other. This is the reason why costiveness follows, so readily, when the skin is overheated. For, being over-heated, it falls into a state of debility, and consequent inaction; in which, from sympathy, the lining membrane of the bowels soon partakes. But inactivity of this membrane is sure to be followed, sooner or later, either by diarrhœa or costiveness; sometimes by one, and then the other, alternately.

A fifth cause of costiveness, in nursing infants, remains to be mentioned. The use of any thing which readily affects the liver, may induce costiveness in the infant. First it may, indeed, as in the mother, excite too much intestinal activity; but this is apt, in both cases, to be followed, in a little time, by its opposite.

Among the substances which act upon the liver to produce the effects alluded to, are fermented and spirituous liquors, of every kind; tea, coffee, and narcotic medicines; high seasoned food and fat meats; too high a temperature; over-anxiety; melancholy, and anger.

EMERSON ON THE HEALTH OF TEACHERS.

It must be highly gratifying to every friend of man, to find that no writer on the subject of education who lays claim to any considerable enlargement of view, presumes for one moment to regard any system of education or even of *mere instruction* as at all complete, which does not include more or fewer directions in regard to the development, growth and perfection of the body. Indeed, so widely is it admitted among us that a sound mind can only be had in a sound body, that he would be thought an ignoramus who did not, in his writings, recognize the principle, and govern himself accordingly.

We have been led to this general, but perhaps unnecessary remark, by the perusal of a work entitled, "The School and the Schoolmaster," in two parts; of which Alonzo Potter, D. D. is the author of one, and Geo. B. Emerson, A. M. of the other. The book is interesting throughout, not only to teachers but to the general reader; but what we have principally in view as the subject of remark and comment at the present time, is the second chapter of Mr. Emerson's division of the work, entitled "Health, Exercise and Diet."

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* I mean, of course, to those schools which make every thing of mere intellect. Wilderspin and Pestalozzi might have managed, with safety, such children as I am describing.

Mr. E. begins by laying down the broad but just principle, "The Teacher should have perfect health." No doubt the parent and indeed every body "should have," that is, would be more happy and useful by having perfect health. But so often have men and women who were diseased in body or mind—perhaps both—been set over little children, that too much stress can hardly be laid on the importance of a different course.

The first thing recommended to the teacher, is *exercise.* Walking, riding on horseback, labor on the farm and in the garden, rowing, skating, driving a chaise or sleigh, and sawing and splitting wood, are among the forms of exercise which are mentioned as having various degrees of excellence, and as being susceptible of a more or less general application. All these kinds of action or exercise should be taken, we are told, in the early part of the day, in the open air, and as much as possible in light and sunshine. Some of our female teachers who think an umbrella or parasol indispensable every time they step out of the school-house, may demur at this; nevertheless, it is written, and we would not blot it if we could. On the contrary, we rejoice that it is not only written but *stereotyped.* Mr. E. does not assert, merely; he *proves.* He first shows the importance of the sun's light to the vegetable world, and afterward to the animal kingdom.

Next to exercise he insists on *cleanliness.* The teacher should make a free application of water to the whole surface of his body, not only for his own sake, "but that he may be able, always, to insist upon it, with authority, in his pupils." "Most diseases of the skin," he observes with great force and truth, "may be healed or avoided by the faithful application of soap and water, or of water alone, if enough be used, and often enough."

Under the head *sleep*, it is insisted that the young require at least six or eight hours; and that they should not be cheated out of their rights. The consequences of too little sleep are pointed out with great faithfulness. Mr. E. might have added a caution against going to the other extreme, and acquiring the habit of sleeping more than is necessary; for a few need it.

The importance to health of general cheerfulness, is largely and justly insisted on. Would that the voice of the writer might be heard on this subject; and not only heard, but regarded!

But finally, he devotes a few pages of his book to the general subject of *diet*. His general principles are these. 1. Food should be simple. 2. It should be taken at sufficiently distant intervals. 3. It should be taken in moderate quantity. 4. Fat should be avoided. 5. Fruit should be eaten, but should be made a part of our meals. 6. Drink should be chiefly water. 7. No unnecessary exertion of mind or body should be used immediately after a meal.

These are all very well; and yet in the detail, Mr. E. has, as we think, *fallen* into a few errors. We will advert to two or three. Few lessons, says he in regard to diet, are so important to be inculcated as this—"Drink not between meals." Now, for ourselves, were there no alternative but to resort to one or the other of two extremes, we would take the opposite of Mr. E.'s statement, and say, "Drink only between meals." But we do not believe in either the one "lesson" or the other. "Drink only when thirsty," is nearer the truth. True it is that our thirst is, for the most part, morbid or diseased—whether at meals or between—but what then? Shall we not gratify it—we mean in moderation?

Had he first advised to a course of diet as well as to such other simple habits generally as would *prevent* thirst, his injunction might have been of more general application. We do not believe that those whose physical education is rightly conducted, and whose diet in subsequent life is such as it ought to be, will need much drink at any time; but we do believe they will be quite as likely to need it about three or four hours after a meal as while eating; and that its use at that time will be even more salutary.

"The intelligent Arab of the desert drinks not," he says, "during the heat of the day. He sees that watering a plant in the sunshine, makes it wither; and he feels, in himself, an analogous effect from the use of water." It will be very difficult to make a New Englander, who eats salt and other condiments, *feel* like the Arab who lives on camels' milk, gum Arabic, and perhaps a few locusts; and above all, to make him feel that water, in moderation, does not refresh and strengthen him, instead of making him "wither."

But again. Mr. E. says—"The introduction of tea and coffee has justly been considered as one of the great advances in the art of living, of modern times; and one cause among others of the increase in the duration of life. They cheer, but not inebriate, and may be taken moderately as long as no ill effect is perceived from their use."

We are willing to leave to Mr. E. the right of drinking tea and coffee, if he will; but not that of encouraging its use in others—above all, in teachers, male or female.

Against this, it becomes us to enter our protest. First; our own experience, uncorrected and unmodified by the experience of others, is as unsafe a guide in regard to coffee and tea, as in regard to beer, cider, or distilled spirits. Yet who would dare say to the beer-drinker or the cider-drinker, that his favorite beverage may be taken moderately as long as no ill effect is perceived from its use? Would any such effect be likely to be discovered by him? Who would presume to say that because the average duration of human life has increased, in spite of the use of cider and beer, therefore they are among the *causes* of that increase? No medical man, we are quite sure; no philosopher, we confidently believe. Besides, it happens that while the average duration of life has been increasing, the average amount of ill health, in the very same countries, has been increasing also. Is our author aware of this?

We wish most earnestly that Mr. E. would reconsider some of these points—trifling as they may seem to him—before another edition of the Schoolmaster is called for. Or if he has not time, amid the pressure of numerous and onerous duties, for a reconsideration, might it not be well to omit a few paragraphs which, if retained as they now are, can do no good, but will certainly do much harm; and which are as incorrect, physiologically, as they are useless or practically injurious.

LEAD, ONCE MORE.

The public mind can hardly be too much excited in regard to the dangers of lead when received into the stomach in the smallest quantities. For despite of what has been said within a few years, we find many sensible people—people, we mean, who are sensible in all other matters—who still expose themselves to its influence. Only a few days since we found one of the most rigid "Grahamites" of this city, in the use of water which was conducted to his kitchen from a neighboring well in lead pipes; and on remonstrating with him, he defended himself by saying that he only followed a custom which prevailed all over the city.

As well, however, may we tread on live coals and not be burnt, as make use of lead, in the transmission of water from place to place, under any circumstances. There is no safety—we repeat it once for all—in the use of lead pipes for the transmission of water for drink, whatever may be the circumstances. Admit that not all who use water conveyed by lead get sick by it, in one, two, or even ten years, still there is no certainty that any person will escape punishment for so long a period as one year. The punishment, moreover, when it arrives, may not always appear in the form of painter's colic, or paralysis, or rheumatism. It may be the means of aggravating or rendering fatal almost any other disease, which but for the lead in the system might have been mild and manageable.

Some persons, we know, are far more susceptible of immediate injury from lead than others. We know one man who cannot soften a single wafer in his mouth for the purpose of applying it to a letter, without producing what he calls a cankered spot in the part of the mouth with which the wafer came in contact. Having occasion, a little while ago, to fasten with wafers some twelve or fifteen letters at once, and forgetting for the moment his danger, he paid for his forgetfulness by a mouth so sore that for several days he could hardly receive his necessary food.

Let no person undertake to solace himself with the hope that because he is less susceptible to the action of this deleterious agent than some other persons, therefore he shall wholly escape suffering or punishment; for he will sooner or later be apt to find out his mistake. His sufferings, moreover, from the accumulated effects, as medical men call them, of the poison in the system, may be terrible.

IS FAT HEALTHY?

"FAT," says Dr. Playfair, "is an unnatural production." This, however, is not quite equivalent to saying it is an *unhealthy* production. Let us attend to the evidence on that point.

"The cause of animals getting fat," says the same Dr. Playfair, "is that they take in more carbonaceous food than they require for producing animal heat;—the consequence is that it is deposited in the cellular tissue in the form of fat."

Again he says:—"Every action of the body—nay, every thought of the mind, is attended with chemical change," &c. "It is on this account that when animals are fattened, they are kept quiet and still. The cruel practice of fattening geese by nailing their feet to the floor, and of cooping pigeons and chickens before they are killed, arises from a knowledge of this fact. When prizes were given by our agricultural societies for fat and not for symmetry, animals were strictly prevented from taking any exercise at all."

One cause of fattening, then, is want of bodily exercise. Another is indistinctly alluded to, viz., want of *mental* exercise. This brings us to another which might have been mentioned—excess of sleep. Excess of heat and impure air are also causes of the same tendency to fat, especially when joined to the former causes. Fermented liquors, also, and coffee, and highly excited or highly seasoned food, have the same effect; and so does an abundance of food of almost any kind whatever.

Surely, then, two things are proved; 1, that fat is, as Dr. P. has well said, an *unnatural* production; 2, that it is a *diseased* production. Whether by being the product of a diseased condition of body, it becomes the source of disease to the men or animals that receive it, is quite another question. We believe, however, there can be no doubt that such a question should be answered in the affirmative.

For to say nothing of the Divine prohibition to the Jews at one period of their history, does not the experience of every day prove the fact? Why do some of the English butchers bleed their fattened and fattening animals several times during the process? Besides, is it not a general law that poisonous or poisoned substances, if they do not induce immediate disease or death on being received into the system, at least become a source of nervous irritation? We believe that it is so; and that if there are exceptions, they are fewer than the exceptions to most general rules.

The only plausible argument in defence of fat, with which we are acquainted, is that which is drawn from the customs of certain savage and northern nations. But if the use of oil by the Esquimaux or the Greenlander were sufficient to invalidate the arguments against it, why should not the use of brandy and other stimulating drinks, by the Russians and other northern nations, be at least a drawback upon the force of the general arguments against alcoholic drinks? Neither the Esquimaux nor the Greenlander is so good a specimen of health or longevity as the Russian.

We need not hesitate on this point, if to the above considerations we add such other facts and principles as are afforded by the study of physiology and the laws of digestion. Fat, we may be assured, no less than alcoholic drinks, tends to disease.

ARE FLESH AND FISH POISONOUS?

I DO not affirm that flesh meat is, in any degree, a poison like wine, to the human constitution; nor that the habitual dietetic use of it in moderate quantities, and under proper regulations is, in all conditions and circumstances, a source of more immediate and permanent evil than good to man, as an individual. On the contrary, I freely admit that man, as an individual, may be brought into such a condition and placed under such circumstances, as will render it both necessary and proper—nay, even best—to eat flesh. But I do maintain that all the evidence of comparative anatomy, when correctly apprehended and accurately estimated, goes to prove, conclusively, that man is naturally, in no measure, a flesh-eating animal; but is organized to subsist wholly on the products of the vegetable kingdom. And with equal certainty may it be shown that all the evidence of physiology in relation to the matter, concurs in the demonstration of the same truth; that taking man as a species extending through all generations, rather than as an individual in particular circumstances, and taking the most perfect state of the human constitution, as the true criterion or point of departure and reference in all reasoning on this subject, flesh meat, in comparison with the best vegetable food, is much more stimulating in proportion to the nourishment which it actually imparts to the body—renders the general physiological action of the organic system more rapid and intense—accelerates all the functions and deteriorates all the functional results—increases the expenditure of the vital properties of the tissues and functional powers of the organs, and more rapidly wears out the vital constitution—that it is not so conducive to the healthy growth, and full development, and true proportions, and perfect symmetry of the body—that it is not so conducive to suppleness, activity, agility and strength, and will not sustain man so well and so long in hard labor and under fatigue, and exposed to changes of weather and of climate—that it tends to induce acute and chronic disease, diminishes the vital power of the body to resist the action of disturbing and morbific causes and noxious agents; and therefore is neither so well adapted to preserve health and prevent disease, nor to enable the diseased body to recover health; nor is it so conducive to long life and true bodily comfort and enjoyment—that it diminishes the sensorial power of the nervous system, impairs the special senses and the powers of perception and reflection, and renders the mind less active, clear, vigorous and spiritual—that it increases the influence of the animal appetites, desires, and propensities on the intellectual, moral and religious faculties, and renders man more sensual, passionate and brutish—more immoral, vicious and criminal, and less able to perceive, understand, and obey moral and religious truth. In short, that the use of flesh, as food, serves to deteriorate the whole complex nature of man—to multiply disease and suffering, and error and wickedness, in the human world, and abbreviate the period of human life, and increase the power of the animal over the intellectual, moral and religious man, and render man less able to understand the true nature and character of God, and the true relations between God and man, and less able to be actuated by any other than selfish and sensual motives; and thus serves to sink man into a deeper and darker and more brutally savage state of barbarian heathenism.—GRAHAM.

FLESH MEAT IN VEGETABLES.

DR. PLAYFAIR, of England, in a late lecture before the Royal Agricultural Society, observes that "plants contain within them the flesh of animals, and all the animal organization does, in nutrition, is to put this flesh in the right place." We believe that he is partially sustained in this opinion, by Liebeg, in his Animal and Vegetable Chemistry.

Now we have many doubts of the correctness of these views, notwithstanding the high authority from which they emanate. But admitting, for the present, their truth, whence arises the necessity of causing vegetable substances to pass through the stomach in order to render them fit to sustain life? In other words, though it were admitted that man, in high northern climates, needs animal food—the most which truly scientific men will claim—why should not the plants, could they be obtained, which, it is said, "contain within them the flesh of animals," answer every purpose?

This would serve to strengthen the experience of Capt. Parry and others, who tells us, that in the polar regions, good bread when it can be obtained, will keep up the vigor of the calorific powers, and indeed of the whole system, quite as well as flesh, fish or oil. The difficulty is, as we suppose, in obtaining *the good bread* which has been mentioned.

These remarks lead us to relate an anecdote. Among the many somewhat recent conversions to the vegetable eating system, is an excellent and learned physician. We unexpectedly found him and his family in the exclusive use of a well-selected vegetable diet, and on venturing to inquire what caused the change, he replied nearly as follows:

"I had read some of your works, but do not know that your views made much impression on my mind. But one day I fell into the following train of reasoning. I said to myself, We all admit that food prepared from wheat, corn, rye, and other farinaceous substances, are amply sufficient to sustain human health, in any circumstances; why then should we pass it through the bodies of animals before we eat it; especially when the process is accompanied with a great loss of nutriment? After reflecting on the subject a little, and talking the matter over with my family, we resolved to abandon animal food forever; and thus far we have had no occasion to regret the change."

We will only add, that this physician has pursued his vegetable course three or four years; and could not now be induced to return to his flesh-pots on any consideration. His eyes being opened by abstinence from flesh and fish, he sees more and more its bad tendency.

CHAPTER OF INTELLIGENCE.

Health and Economy.—These commonly go hand in hand. What is really and truly economical, is generally healthful; and the contrary. A writer to the editor of one of our religious papers makes the following statement, which we wish some of our readers would deeply ponder:

"I have saved nearly fifty dollars from my ordinary expenses within the year past, for the cause of mercy; and that, as I believe, without injury to my health. Tea, coffee and tobacco formerly cost me at least ten dollars a year; and now I am manifestly more healthy without them. When will men cease purchasing themselves misery, in the consequences of sensuality and pride, with Christ's money?"

Causes of Suicide.—In a letter from Mr. Farr, published in the "British Registrar General," we find the following excellent remarks on the causes of suicide:

"It may be remarked that the artisans most prone to suicide are subject to peculiar visceral congestions; that suicide is most common to unhealthy towns; and that the influence of medicine on the mind and on the unstable and ungovernable impulses which are often the harbingers of suicide, is incontestible.

"To place the shoemaker, tailor, baker or printer in the same favorable circumstances, with respect to air and exercise, as carpenters and masons, would be impossible. But the workshops of all artisans admit of immense improvements in ventilation. Cleanliness is greatly neglected. Neither the men nor all the masters appear to be aware that the respiration of pure air is indispensable;

that the body requires as much care as the tools, instruments and machines; and that without it, neither the body nor the mind can be kept in health and vigor.

"Parks and public walks will afford the artisan an opportunity of refreshing his exhausted limbs and respiring the fresh air; and the health and temper of the sedentary workman may be much ameliorated, by affording facilities in towns for athletic exercises and simple games out of doors, which while they bring the muscles into play, unbend, excite and exhilarate the mind. Moral causes and the regulation of the mind have perhaps more influence on the educated classes, but all must derive benefit from out door exercise."

Premature Birth.—During several successive months of the present year, the number of still-born children in Boston, as *reported*, is a fraction less than one to eleven deaths. In the city and county of New York, according to the Report of Dr. Griscom—whose faithfulness cannot be questioned—the premature and still-born are a fraction less than one to thirteen deaths. It has been our practice in the pages of this journal and elsewhere, to place the proportion at only one to fifteen in our cities. It seems, therefore, that we have either made an under estimate, or the number of premature births is increasing. It should be remembered, moreover, that the still-born children and premature births are not all reported. We are far from being sure that their number may not amount to one for ten deaths all over the United States. But even at one for twelve, who is not shocked at the thought, especially when some of the *causes are duly considered?* Shall the physical transgressions of parents and others continue to be the means of precipitating from 37,500 to 45,000 of these "germs of existence," every year, to the tomb, or to a place of deposit less honorable?

Tubercles and Cancer.—We have often alluded to those seeds of disease in these days, so often and so early found in the human body, especially the lungs. Dr. Engel, of Vienna, estimates the proportional frequency of tubercles in the lungs to that in the membranes of the brain and in the liver, spleen, &c., as eighteen to one; to those in the brain itself and the kidneys, as eighteen to two; and to that in the peritoneum and intestines, as eighteen to three.

Cancer in the lungs, on the contrary, in proportion to that in the liver, is only as eighteen to forty-eight; to that of the stomach, as eighteen to forty-two; to that of the intestines and kidneys, as eighteen to twelve; and to that of the brain, spleen, uterus and peritoneum, as eighteen to eighteen.

It is not improbable that thousands of our race, by reason of transgression, are at this moment affected with cancer, and millions with tubercles, who cannot be persuaded to change their habits, because they do not believe there is any danger.—A man lately died in New Hampshire at 76 years of age, who, till two years before, was supposed to be healthy; except that he was a little reddened with spirits. After death, a stone was taken from his bladder two and a quarter inches long, two inches wide, and one inch thick. Does any one believe this individual was healthy till he was 74 years of age, and only unhealthy two years?

Sleeplessness.—The Boston Medical and Surgical Journal for May 17, 1843, contains an account from the sufferer himself, of a loss of sleep for many years, without the power to regain it. He has had three periods of sleeplessness; one of six weeks; one of five months; and one—that now in continuance—of four years and five months.

The name of the sufferer is Robert F. Gourlay; by birth a Scotchman. He may be laboring under a degree of monomania, but his unvarnished story, which we incline to believe, is so remarkable, and withal, so physiologically instructive, that we commend it to the notice of our readers.

No Wine.—At a late public dinner of the Massachusetts Medical Society, no wine was placed on the table. Are medical men beside themselves, to venture on total abstinence at a public dinner table, especially at so *very early* a period of the temperance reformation!!!

Pereira on Food and Diet.—It augurs well for mankind when our wisest medical men take hold of the subject of prevention. A new work on "Food and Diet," by Dr. Pereira, a distinguished writer on Materia Medica, has appeared at New York and London. It is published in New York under the editorial care of Dr. Lee. It goes to demolish some of the chemical theories of the day.

Physiology Defended.—Dr. Caldwell, of Louisville, Ky., is out, with great wit and some truth, against Liebeg's Animal Chemistry. Dr. C. does not believe man is a mere corporeal stove, for burning "Dr. Liebeg's fuel."

TEACHER OF HEALTH.

OCTOBER, 1843.

PHYSIOLOGY IN COMMON SCHOOLS.

REPORT OF MR. MANN.

When the "Annals of Education" was established, in 1830, few persons in this country—even among our medical men—could be found, who were favorable to instructing the mass of the community in Anatomy, Physiology and Hygiene. Drs. Bell and Condie, in the Journal of Health, Dr. Coffin, in the Boston Medical Intelligencer, and Mr. Russell in the Journal of Education, were perhaps nearly the only editors in the United States who dared to risk their reputation by espousing a cause so unpopular.

But times are altered. The pages of every volume of the "Annals of Education" contained articles on this subject, not only from our own pen, but from the pens of others. Then, nine years ago, the progenitor of this Journal—the Moral Reformer—came out. Other papers soon lent us their aid. Even a popular medical journal in Boston, though at first opposed to our efforts, not only came gradually over to our side, but its editor became the author of a book for schools on Anatomy, which he pushed as far and spread as widely as he could. Authors, also, began to speak out, as we have seen in other numbers. Nay, even the medical men, generally, of Boston and elsewhere—the more intelligent of them at least—changed their position; and became among the warmest advocates of a cause to which, for nearly twenty years, we have devoted nearly all our energies of soul and body.

Among the most cheering indications of the altered state of things, is the fact that the Hon. Horace Mann, in his recent or sixth Annual Report, as Secretary of the Massachusetts Board of Education, has given no less than one hundred and four, out of one hundred and forty-three pages, to the task of proving that Physiology, or a knowledge of the laws of Health and Life, ought to be taught in all our schools. This is a triumph which we did not expect—an event which we could hardly have hoped to live to see.

As a consequence of the appearance of this masterly production, not many years will elapse, before the district schools of Massachusetts will have the "House I Live In" (as an introduction), the "Class Book of Anatomy" and "Outlines of Physiology," or a set of books of the same general character, but of greater merit,as frequent in them as is now the manual of grammar, geography, or arithmetic. But will not New York, Maine, Connecticut and the other States soon follow? Ought we not then to say that a great work has been achieved? And if we may not triumph in the achievment, may we not, at the least, rejoice?

But we took up our pen, chiefly, to mark off, to the the printer, certain paragraphs of Mr. Mann's Report, for insertion in our journal. Among the more important are the following. He is endeavoring to show the importance and necessity of Physical Education.

"The hastiest glance at the condition in which we are placed, in this life, will demonstrate, not merely the utility, but the necessity of correct physical education, as a department of knowledge to be universally cultivated. We are introduced, at birth, into the great agencies of nature.

Each one of these agencies is sufficiently powerful to obliterate our senses, to maim our persons, or to extinguish our lives; and yet we are profoundly ignorant of their principles and of their mode of attack. We bring into life, it is true, a certain amount of vital force, which is antagonistic to the forces of nature; but this vital force at first is so feeble, that if not protected against its assailants, it is subdued at once, and life is annihilated.

"The chemical affinities or forces, for instance, hold perpetual combat with the vital force. Our bodies are the battle-ground where these hostilities are carried on. If the vital force be driven, for a single minute, from any part of our bodies or organs, forthwith, in obedience to the chemical law, decomposition or mortification commences; and if the chemical force be not overborne and beat back by the vital force, the mortification extends and death ensues.

"And what is more, the vital force with which we are endowed cannot be sustained for an hour, without drawing for support upon the hostile elements by which we are encompassed;—that is, a certain portion of these elements is essential to our existence, while an excess of them is fatal to it; and further, the result is equally fatal whether we take too much or too little. Air is a necessary of life from the first moment of our introduction into it; and yet the extinction of life will as certainly ensue from exposing the whole body to the action of the changes and currents of air, as from an entire deprivation of it. Necessary as is the air, yet if its temperature varies very much from that of the blood, either on the side of coldness, or that of warmth, each extreme is equally fatal. And again, if the air is too moist, or too dry, the vital organs are clogged by its humidity, or inflamed by its aridness. Drink is necessary, but at first the urn of life is so shallow that a few drops in excess will sink it forever. Food is necessary; if withheld, death follows by privation; if administered too freely, death equally follows by repletion; and if of an unwholesome quality, then it becomes a poison. Light is necessary to awaken the visual sensibility of the eyes, yet too strong a beam will extinguish them forever. Sound is necessary to break the silence of the ear, yet if too violent and shrill, it will rend the delicate organ it should only have vibrated.

"Now nature parcels out to us no fixed definite quantities or qualities of these elements, which are essential in degree, in excess fatal. In the course of a year, from the melting heats of summer to winter's congelations, we are carried through variations in atmospheric temperature, amounting to more than a hundred degrees. Even in a single day or hour this temperature varies to an extent utterly destructive of health and life itself, if our prudence does not mitigate its changes. It varies, too, from the extreme dryness of the north-west wind, which will extract moisture from kiln-dried wood, to the humidity of a southerly or south-easterly wind, in which a fish could hardly perceive that it was out of its own element. We are also placed in the midst of a boundless profusion and variety of material for food, both of the animal and vegetable kinds; and these kinds are intermixed with attractive though poisonous substances; and yet nature utters no warning voice when we are about to pluck and eat unwholesome fruits, nor does she stretch forth a hand to arrest our hands when we are indulging to a surfeit. Although, therefore, the vital force which we bring into life, if duly nurtured and protected, will speedily obtain immense accessions of strength and power of endurance, yet it is always surrounded, pressed upon, besieged, by the mightier forces of nature; and hence not only our health and strength, but our very existence, depends upon a knowledge how to adapt ourselves to these external agencies. Neither heat nor cold, nor moisture nor dryness, nor food nor raiment, is meted out and apportioned to us, as needed for our daily use, and the prolongation of life. We are left without any revelation, to find out by our own study, what kinds, in what quantities, under what circumstances, they must be used to yield us the longest life and greatest power. As all the agencies and objects of nature which surround us, and come in contact with us, are *unintelligent* with regard to our wants, if we also are unintelligent in regard to their properties, then we and they hold the same relation to each other, as that of particles in a chaos.

"In early years, these adjustments, adaptations, protections are left to parental knowledge and vigilance; afterwards, the responsibility is transferred from parents to offspring. But parents are deplorably ignorant. Hence they allow unhealthy indulgences. They inculcate false principles. They establish bad habits. As an inevitable consequence, sickness and suffering abound. Disease or debility of some vital organ is the common lot, rather than the occasional fact. Untimely death is so frequent as no longer to excite surprise. And maladies whose pains are severer than those of death, are bequeathed from parents to children, as a disastrous and perpetual heritage."

To all this reasoning—sound as it is—it is usual to reply by saying that our ancestors, a century ago, without the knowledge here contended for, were not only as healthy as we are, but even more so; and that savages, more ignorant still, are nearly as healthy as civilized people. As if to meet the force of such objections as these, as well as to show, in a manner still more striking than before, the vast importance of a knowledge of the laws of health to the civilized world, Mr. M. proceeds as follows:

"Suppose any portion of our population to be as unlearned in the science of physiology as a tribe of savages, and a hundred reasons will be apparent why such portion would suffer more of disease, and physical degeneracy, than savages themselves. In civilized communities there are many causes creative of disease which have no existence in a savage state. In the former, the population is always more dense than in the latter. Hence people are crowded together in masses, and this mode of living, where ignorance prevails, is universally accompanied with a dearth of pure air; and thus at once an indispensable constituent of health is taken away, and a prolific source of disease substituted for it. In the various processes of the arts cultivated by a civilized people, unhealthful occupations are pursued. All in-door and sedentary employments come within this description. In many branches of manufacture, noxious products or gases are evolved which the operator inhales to the detriment of health, and often to the direct and obvious abridgment of life. Among savages there is no painter's colic. No polisher of steel breathes steel dust to inflame and corrode his lungs. No smelter lives in an atmosphere of corrosive gases. No preparer of beverages inhales the carbonic acid which is evolved in the process of fermentation. No savage tribes have ever reached such a depth of degradation as to render the enactment of penal laws necessary to rescue innocent and helpless children from excessive labor in factories and coal mines. Amid the luxuries of a civilized community, the more degraded classes are surrounded by temptations always, and opportunities occasionally, for indulging their appetites in forms of excess from which barbarians are happily exempted. All these are powerful agents for breaking down the health and constitution of those who occupy one extreme of the social scale. The other extreme is also assailed by causes hardly less potent for evil. What are seductively but falsely called the refinements of life; an ability to indulge in luxurious and epicurean diet, without any necessity for a corresponding degree of active exercise; fashions of dress, in impotent defiance of climate; the conversion of night into day; systematic bodily indolence, lowering the tone of the system, and thus rendering necessary all the guards which human art can devise against those inclemencies of the seasons which ought to be braved instead of being shrunk from,—all these are mighty causes of physical deterioration from which the savage whom we pity is free. These are evils which, to a lamentable extent, characterize the civilization of the present age. Comfort has been sought so blindly as to bring a thousand discomforts in its stead. Means used to prolong life have shortened it, because adopted in ignorance of its conditions. Yet much as these errors destroy the vigor, abridge the years, and impair the happiness of the parents, their consequences are visited with terrible aggravation upon children.

"And this is true of both the classes above referred to. Were the genealogy of the families to be traced, it would be commonly found that those who occupy what are usually called, by way of distinction, the highest and the lowest grades in society, run out in two or three generations. Among the very poor, mortality is greatest below the age of five years. Among the wealthy, skill and appliances preserve their offspring through the years of childhood, to perish between the ages of fifteen and twenty-five, just as the hopes and prospects of life are dawning upon them. The lineage of the poorest comes to a termination by poverty and wretchedness; that of the richest goes off in chronic and hereditary distempers, gout, apoplexy, and, especially among females, by consumption. Both are replenished from the middle classes of society, who owe their vigor and the perpetuation of their families, rather to the happy fortune of being compelled to labor, to be out much in the open air, and to incur what they call exposures and hardships, than to any knowledge of those laws which they ignorantly observe, but whose observance, though ignorant, is thus generously rewarded.

"Can reasons so cogent and demonstrative as these be urged in favor of the adoption, in our schools, of any of the other higher branches of knowledge? Here is a study upon whose cultivation the power to pursue all others with vigor and alacrity depends. Algebra and other branches of mathematics may discipline the intellect, and enable it to concentrate all its divergent forces into a focus of light to be thrown on any particular point. Rhetoric and logic may make us acquainted with rules whereby to judge of the taste or reasonings of others, or to fashion our own. An acquaintance with the learned languages may enable us to read a few books, written in the infancy of society, before philosophy had acquired its present depth and expansion, and when scarcely any thing was known of those great civilizers of mankind—the useful arts. But an observance of the physical laws—and knowledge must necessarily precede the observance—would prepare us to enter upon any one in the whole range of studies, or upon any of the active duties of life, with tenfold capacity and ardor. Soundness of health is preliminary to the highest success in any pursuit. In every industrial avocation it is an indispensable element; and the highest intellectual eminence cannot be reached without it. It exerts a powerful influence over feelings, temper and disposition, and through these upon the moral character. If now and then, as a rare exception to the general course of events, an extraordinary individual appears, who, without the sustaining power of bodily vigor, enlightens the race by his solitary contemplations, yet it is believed that such prodigies have never transmitted their power to their offspring, and that no instance has existed where great executive efficiency has been united to intellectual or moral pre-eminence, in the absence of physical health.

" So, too, in the common course of nature, it is as impossible that a mother who is physically diseased, will rear a healthy family of children, as it is that an immoral mother will train children to morality.

" Yet, incredible as it may seem, the means of acquiring vigor, quickness, endurance, have been sought for, not by the clergyman, the lawyer, the artist, the cultivator of letters, the mother; but by the wrestler, the buffoon, the opera dancer. There are ten professors of pugilism in our community, to one of physical education in our seminaries of learning.

" If opportunities for ease, and an eager competition for enervating luxuries and refinements, take possession of society without any corresponding knowledge of the laws of health, the race itself must rapidly deteriorate. Such a degeneracy must not only be considered as one of the greatest calamities that can befall a people, but it must be entered on the catalogue of its greatest sins. We look with abhorrence upon those barbarous nations who practise infanticide; but they are as little conscious of the wrong of depriving their offspring of mere animal life, as we are of depriving ours of health—that is, of all the blessings which life affords; and an enlightened posterity may not be without difficulty in determining which is the greater offence against nature, to relieve the impotent, the diseased, the deformed child at once, of all mortal suffering, or to rear a race of puny, dwarfish, imbecile children—the inheritors of parental maladies, doomed to suffer, through all the years of their existence, for offences which they did not commit, and to leave to their own offspring a patrimony of aggravated and redoubled miseries."

Let the reader pause, here, long enough to consider well the amazing import of the last paragraph. But the two which follow are, if possible, still more striking than any of the preceding.

"About seven millions, or one half of the free white population of the United States, are under eighteen years of age. Could we allow to these only an average period of twenty-four or five years, after having reached majority, how important to the country would be their condition as to health and strength! How much more important, yet how much less regarded, than if they were an army of seven millions of men! And what significancy and impressiveness does it give to the fact, that half of mankind die before reaching the age of twenty years. The amount of individual, domestic, social and public interests, dependent upon the physical well being of this multitude, cannot be appreciated by any finite mind. It is too vast for our comprehension. We can hardly conceive of the latent power which exists even in a single healthy, well formed infant. What a magazine of forces lies pent up within the narrow limits of its frame! What endurance, celerity, energy, achievement! As a mere material agent, a physical machine, there is something almost sublime in the idea of its hidden capacities and might. Who, without the evidence of observation and history, would be so credulous as to believe, that in the tiny, flaccid arms of a group of infant children, there were concealed such energies as could turn a granite quarry into the dwellings and temples of a city, or convert a forest into ships, or a wilderness into a garden,—or almost turn the earth inside out, to bring up its deep deposited treasures for human comfort or embellishment? Yet we know that these helpless beings are endowed with innate forces which render such achievements possible and practicable,—that they can not only satisfy the wants of the body, but provide, in abundance, for the higher wants of the soul; and during the period of a short life, can prepare bounties and blessedness for continents and centuries.

"But, on the other hand, the 'glassy essence' of the child's life may be so treated, that he will become more and more fragile, that he will be tormented with the pains and infirmities of disease, instead of exulting in the vigor and buoyancy of health ;—not able to impart aid to others, but constantly extorting assistance from them ; adding nothing to the common stock, but drawing his own subsistence from it ; and instead of leaving the world indebted to him for the services he has rendered it, departing from it like an absconding debtor from among abused creditors. And if this is so important in regard to a single individual, how vastly is this importance increased, when multiplied by the number of all!"

The three or four following paragraphs will serve to show that the subject in question has something to do with politics—not indeed with that narrow notion about politics which rises no higher than a little reading of congressional or legislative news, and a little extra effort during an electioneering campaign for a president. We are not without doubt, however, whether our petty politicians, should they chance to read, will understand his remarks. It is difficult to escape from our accustomed round of feeling and thinking, and enter into the thoughts and feelings of another, especially a superior.

"An accurate knowledge of a few great physiological principles, together with a sound judgment or discretion in applying them, will suffice to ward off an inconceivable amount of human suffering, and to confer an ability to make great additions to the public welfare instead of subtracting from it. The Creator assures us that "He doth not afflict willingly nor grieve the children of men ;" and if in all things the race should obey the physical laws of God, they would no more suffer physical pain, than they would suffer remorse or moral pain, if in all things they would obey the moral laws of God.

"This subject has merits which should command the attention of the statesman and political economist. All investments to preserve or increase the public health, would be reimbursed many fold in an increased capacity for production. One of the most important items in a nation's wealth consists in the healthfulness and vigor enjoyed by its people. All agriculturists and manufacturers must feel the force of this remark in regard to their own workmen; and they would feel it still more if they were obliged, at their own expense, to support those workmen, during all periods of sickness or incapacity to labor; and this is the relation in which the state stands to its citizens. It has been said by some writers on political economy, that from one seventh to one eighth of all the wealth of a country originates in the *labor of each year*. Hence if any nation or community should cease from production for seven or eight years, the whole of its wealth—houses, lands, goods, money—would be consumed. What a forcible idea of the value of labor is presented by this fact! Yet what a sick workman or operative would be to a capitalist who was obliged to maintain him, a sick citizen is to the Republic. Every sick man, every man rendered unserviceable by general debility or specific ailment, must be subtracted from a nation's available resources. He not only adds nothing to the common stock, but he draws his subsistence, in some form—and often, too, a very expensive subsistence—from the store house which the industry of others has filled. Omitting all considerations of personal and domestic suffering, of the extinction of intellectual power, and of those moral aberrations which originate in derangement and disease—and considering the race under the mere aspect of a money making power—in this respect it is clear that the health and strength of one community if set in opposition to the debility or infirmity of another, would be sufficient not only to determine the balance of trade, but to settle all other points of relative superiority. Let such information be diffused through the public as all the children of our schools might easily acquire, and a single generation would not pass away without the transfer of immense sums to the other side of the profit and loss account in the national Leger. Of course I do not mean that all diseases could be abolished at once, even by the universal diffusion of a knowledge of their causes; or that the era foretold by the prophet would be ushered in, when 'the child shall die a hundred years old,' and when there shall be no 'old man that hath not filled his days.' The violation of those beautiful and benign laws which the Creator has inwrought into our system, has been too heinous, and too long persevered in by the race, to be expiated or atoned for in a single age. Disease and debility transmitted through a long line of ancestors, have acquired a momentum by the length of the descent, which cannot, at once, be overcome. But I do mean, that if this subject were generally understood, such a change would be wrought in a single generation, that a broad and deep current of wealth would be made to change its direction; and instead of millions annually flowing outward from the common treasury, to defray the various expenditures of sickness, that treasury would be replenished by an equal number of millions coined in the mint and from the ore of labor-loving health. Yet amid all our pecuniary speculations, this grand financial operation of substituting health and strength for sickness and debility—that is, immense gain for immense expenditures—has been unheard of.

"The pecuniary merits of this subject may be presented under another aspect. Children at different ages and under different circumstances, may be regarded as representing investments of different sums of money. These investments consist in the amount which has been expended for their nursing, rearing, clothes, board, education, and so forth, and in the value of the time of others which has been appropriated to them. Though differing exceedingly in regard to different persons, yet in this country, the aggregate expense with its accruing interest of the great majority at the age of twenty or twenty-one years, can hardly be estimated at less than from $500 to $1000, after deducting the value of all services performed. Now if half mankind die by the time they arrive at this age or before it,—and half of these come to their untimely end through the ignorance of their parents or themselves, what an amazing price does our ignorance cost us! With what reckless prodigality do we continue to cherish it! What spendthrifts we are; not only of the purest sources of affection and domestic happiness, but of wealth!

"Compared with the economical value of physiological knowledge to a nation, what is the utility of discovering a north-west passage, or of exploring the sources of the Niger, or circumnavigating a continent of ice around the south pole? Yet no systematic measures have ever been taken by any government for its universal diffusion among the people, although it is certain that such knowledge is a condition precedent without which a high point of health for the whole community can never be reached. Our common schools are a channel through which this knowledge—as delightful in the acquisition as it is useful in the possession—may be universally diffused; and in the long run, its legitimate products will be found to transcend, in value, the gains of the most adventurous commerce, or the spoils of the most successful war."

We cannot refrain from making a few more brief quotations from the Report, though it were at the risk of being, to some, a little tedious. The truth is, that we are quoting from an extraordinary document, and we rejoice that it was intended to be public property. We will do all we can to extend its circulation.

The allusion of Mr. M., in a preceding paragraph, to the fact that half or more of mankind come to an "untimely end," reminds us of what he says in another part of his Report. He is speaking of the vital organs—the heart, lungs, stomach, brain, &c.—as being a *confederacy* rather than *a single independent state;* and making therefrom certain highly important inferences. We bespeak, for what he says, the most careful attention of every reader.

"The stomach was not made to last for ten years and then to break down; the lungs for twenty, the heart for thirty, and the brain for forty or fifty, and so on; but an identical term of existence was imparted to all, so that they might run on in the race of life together, and come simultaneously to their goal. Yet owing to our ignorance and mismanagement of ourselves, and especially the mismanagement of children by ignorant parents, one or another of these great vital organs is destroyed, while the rest are in comparative health and vigor; or some two organs, by different abuses, incur diseases which require incompatible remedies, so that what is done to cure the disease of one, aggravates that of the other. Not one individual in a hundred, in our times, dies of old age—that is, after each of the vital powers has expended its quantum of force, and when they sink together to a peaceful close. In more than ninty-nine cases in every hundred, death is a terrible struggle between the vital energy of a majority of the organs, which cling with strong tenacity to life, and the fierce disease or premature decay of some other, which drags them, reluctant and resisting, down to the grave. * * * There is no survivorship. If one perishes, (i. e. one of the vital organs,) all perish."

We shall conclude, for the present, with the following extracts:

"A man in perfect health may be said to be lord over the climate in which he lives; but if health be broken down, the climate is lord over him. All nature seems to wage war upon him; treating him as some tribes of wild animals are said to treat any one of their number which has broken a limb—all falling upon him to kill him. The food which before nourished, now distresses him. The cold winds which once braced his frame and exhilarated his spirits, now inflict consumption and asthma upon him. Heat fevers his blood, and every pore becomes an inlet through which disease enters. Health alone can place us in harmony with external nature.

"All ignorant people regard disease as some foreign substance or body, which has effected a lodgment in one or another part of the frame, and whose removal is necessary to the restoration of health. They make no distinction between an organ and its function, between the agent and the office it performs. Hence their remedial measures are all designed to expel some intruder, instead of substituting a healthy for a diseased action in any vital organ. Their imaginations personify disease as an impurity in the blood, or a foul accumulation in the stomach; and the impostors who prey upon their ignorance and credulity, have no difficulty in creating evidence to confirm their belief, by giving such medicines as make the dupes declare they do not wonder they were sick. If the simple difference between an organ and its function were understood, it would put an end to an otherwise endless amount of quackery."

FACTS ON HEALTH AND LONGEVITY.

"PURE water," says Dr. Leake, "is the fluid designed by nature for the nourishment of all bodies, whether animal or vegetable. Water drinkers are observed to be more healthy and long lived than others. In such, the faculties of body and mind are stronger, their teeth whiter, their breath sweeter, and their sight more perfect, than in those who use fermented liquors and much animal food."

I. Let us now see whether facts confirm this testimony. And first let us look at large bodies or masses of men.

In New Hampshire, between 1706 and 1840, no less than 163 persons either reached or exceeded a century. The people were, for the most part, water drinkers.

Kalm, in his Travels, says that "at the first arrival of Europeans, the native Indians were often found over 100 years of age; but that since Christians have taught the use of strong drinks, those who cannot resist their appetites hardly reach half the age of their parents."

It is stated in "Bacchus:"—"The natives of Sierra Leone," says the Monthly Magazine, "whose climate is said to be the worst on earth, are very temperate. They subsist entirely on small quantities of boiled rice, with occasional supplies of fruit, and drink only cold water, in consequence of which they are strong and healthy, and live as long as men in the most propitious climates.

Dr. Barrows, in his Travels, says of the Kaffres—"Milk is their ordinary diet, which they always use in a curdled state; berries of various descriptions, and the seeds of plants which the natives call plantain, are also eaten, and a few of the gramineous roots, with which the woods and the banks of the rivers abound. Occasionally, too, the palm bread of the Bosjesmans is found among them.

Their total ignorance of the use of ardent spirits and fermented liquors, and their general temperance and activity, preserve them from the ravages of many disorders which abound among the other native tribes, to say nothing of the value of their independence."

Spencer, in his Travels in Circassia, published as late as 1837, says:—"Owing to their *robust frames* and temperate habits, the Circassians generally attain an advanced age, their diseases being neither numerous nor dangerous. Their favorite beverage is the *skou*, a species of sour milk peculiar to the east."

Of the Brahmins, Sir Wm. Temple thus testifies:—"Their temperance is so great that they live upon rice or herbs, and upon nothing that has sensitive life. If they fall sick, they count it such a mark of intemperance, that they will frequently die from shame and sullenness; *many have lived a hundred*, and some two hundred years."

Dr. Farr says that by the last grant of Providence to man, his life is 120 years; and where disease, arising from other causes, does not shorten it, the reason why so few attain to that age is to be found in the excessive stimulation to which the mass of the community are continually subject.

II. Let us now, in the second place, look at individuals. Our facts, here, are chiefly derived from Bacchus.

Francis Secardi Hongo died in 1702, aged about 115 years, and left behind him 49 children. He was never sick, nor did he suffer much, in sight, hearing, memory or agility. Having lost all his teeth by the age of 110, when arrived at his 114th year he cut two new ones. He used no drink whatever but water—not even coffee or tea; nor any tobacco. His habits, in other respects, were temperate.

It is related by Sinclair from Bayles' Dictionary, that the famous civilian Andrew Tieraqueaus, who gave to the world yearly a book and a son, (the latter by one wife,) never drank, from his earliest infancy, any drink but water.

On the 26th June, 1838, Mrs. Letitia Cox, of Jamaica, died at the great age of 160 years. She declared that she had never, during her whole life, drank any thing but water.

A colored woman on the same island and at about the same time, died at the age of 140. She, too, had always been a water drinker.

Anne Parker, of Kent, England, died at the age of 109. Excepting the moderate use of tea, she had, for life, been a water drinker.

A woman was living quite recently, at Glasgow, Scotland, 130 years of age, who for the last 50 years had not drank any thing stronger than tea or coffee; nor had she ever taken any medicine or been bled. For a century she had not felt pain. Her grandfather died at the age of 129, and her father at 120 years of age; both of whom were very temperate.

A woman died in the west of England a few years ago, at the age of 110, leaving 450 descendants, who for the last 60 years of her life, had never taken any thing of an intoxicating nature except when ordered by a physician.

The *Miscellania Curiosa* mentions a man 120 years of age without the loss of a tooth, and of a brisk and lively disposition, whose drink from his infancy was purely water.

Tairville, in Shetland, a water drinker, lived to the age of 108. His son lived longer than he, and his grandchildren lived to a great age. None of them often drank any thing stronger than milk, buttermilk, or water.

A gentleman of great military eminence said to Sir John Sinclair—"My health has been tried in all ways, and by the aids of temperance and hard work, I have worn out two armies in two wars, and probably could wear out another before my period of old age arrives. I eat no animal food, drink no wine or malt liquor or spirits of any kind. I wear no flannel, neither regard wind nor rain, heat nor cold, where business is in the way."

III. It is usually supposed, even in these days, that whatever may be the facts in regard to others, soldiers must have something stronger than mere vegetable food and water. Let us then, in the third place, adduce testimony on that point.

The Persian army, in the best days of that ancient kingdom, was composed of soldiers who, till they were arrived at years of maturity, were fed only or principally on bread and cresses. Such in particular was the fact in regard to the soldiers of Cyrus, and to Cyrus himself. When the Persians were to be feasted in one instance, Cyrus only sent them an abundance of bread, which he declared would be sufficient for them.

The soldiers of Egypt, and probably the men who erected her pyramids, were vegetable eaters and water drinkers.

The Roman soldiers, in the days of Rome's highest glory, lived on vegetable food chiefly—principally "Graham" bread and fruits—and on vinegar and water.

The Lacedemonians, as is well known, relied largely on vegetable food to give vigor to both body and mind.

Boadicea, queen of the *Iceni*, A. D. 61, in an eloquent appeal to her army, drew a striking comparison between the then effeminate habits of the Romans, and the simple but invigorating practices of her own country. "To us," she observed, "every herb and root are food, every juice is our oil, and water is our wine."

The soldiers of Oliver Cromwell, during their laborious campaigns carried with them knapsacks containing oaten meal, which when hungry they mixed with water. On this diet, for a considerable period, they principally subsisted, and sustained great fatigue in the full vigor of health.

The same diet, viz. cakes of oaten meal and water, sustained the Scotch armies both of ancient and later times; and yet their athletic powers were quite proverbial.

The Bedouin Arabs, though their duties are of the most fatiguing and harassing description, perform them in the most cheerful manner. Skinner in his travels testifies that "from daylight they are up and active, that they sleep ready to jump upon the least noise or motion, and take their turn in the guards;" that they sleep like dogs, whenever they have a moment to spare; and yet that "they endure all this *with no other food than coarse bread and a few vegetables*," and with no drink but water.

The soldiers of Peru, and of some of the other South American states, will perform the most rapid and hazardous journeys, with nothing but parched corn, and a leaf which they are in the habit of chewing.

It is well known that Europeans sustain the hot climate of the East Indies with great difficulty; especially if subjected to close confinement. And yet it is a curious fact, that of "a great number of British officers who surrendered with Gen. Mathews," and were long kept "in the dungeons of Senigapatam on a handful of rice a day and a little water," every one of them returned to the army in perfect health. It is moreover worthy of remark, that many of them entered the dungeons with severe liver complaints; and that while their brother officers of the army, who, along with the enjoyment of their liberty at home, had been cheering themselves with wine and all "the varieties of a groaning table," had perished in great numbers, the poor fellows who were saved by the "starvation system," were actually promoted to fill their places.

TEMPERANCE OF THE PRIMITIVE CHRISTIANS.

UNDER this head, Mr. Grindrod, in his work, entitled "Bacchus," at the close of a series of extracts from the epistles of Paul and Peter, has the following remarks:

"These Scriptural exhortations lead us to the following inferences:

1. All unnecessary and luxurious consideration about food is interdicted; at least such as would tend to lead mankind to neglect the more important concerns of the soul.

2. The necessity of great caution is enforced, lest the affections be ensnared by improper indulgence, and continual prayer is recommended as a means of escaping from such temptations.

3. 'Lusts of the flesh,' an expression embracing every thing which could at all tend to inflame the body or the mind, 'and war against the soul,' are forbidden as ensnaring, and contrary to the spirit of the gospel. An express declaration is made that they that indulge in fleshly pleasures cannot please God.

4. The causes of sin, and of course all temptations or inducements to it are prohibited; such as meetings for the purpose of fleshly indulgence, revellings, banquetings, and similar occasions, where the time is not redeemed or improved to the glory of God.

5. The lives of Christians are to be such as to present to the Gentile world proper examples of temperance, as an essential part of piety, and to form an inducement to the unconverted to adopt the principles of Christianity.

6. Watchfulness and sobriety are urged as duties incumbent upon every sincere Christian. Hence it may be observed that both the mind and the body were at all

times to be kept in such a state as would be pleasing to God, and would not disqualify the creature, at any period, from entering into the presence of the Creator."

Mr. G. also quotes the views of Clemens Alexandrinus, who flourished about 200 years after Christ, concerning the diet, &c. of what he calls genuine Christians. This writer strongly reprobated *glutting and luxury*, and the use of a variety of aliments, and recommended the practice of taking but two meals, at most, in a day ; the first to consist of dry bread, without drinking ; the second, of milk, cheese, honey and olives. The authority of Antiphanes, a Delian physician, as well as that of Artorius, is also adverted to. The former "was of opinion that the use of a *variety* of aliments was one principal source of disease," and earnestly recommended the adoption of a vegetable diet. The latter wrote a book concerning *long life*, in which he insisted that "no more drink should be taken with food than was sufficient to moisten it in order to assist digestion."

In a work by the Abbé Henry on the "Manners, Behaviour, and Practices of Christians," at page 63, are found the following remarks :

"In their diet, and way of eating, those Christians (the primitive Christians) always, even out of their fast days, observed a great degree of frugality and moderation. They were taught not to live to eat, but to eat to live. The end of food being health and strength, and keeping the body in a condition fit for labor ; all beyond this was superfluous and excessive. It was not, therefore, for a Christian to study the art of eating, or to indulge the wantonness of the appetite ; to hanker after curious dishes, sumptuous feasts, or those delicacies of the palate which could not come to the table without the assistance of skilful cooks or the science of the kitchen. They applied to themselves that saying of Paul, in a literal sense, and made a general rule of it—*It is good neither to eat flesh nor to drink wine.*"

On another page are found the sentiments which follow:

"Many of them lived only on salads, fruits or pulse; nay further yet: many there were, who finding pulse (as peas, beans, and lentils) too nourishing for them that would subdue the flesh, reduced themselves to the living simply on herbs, with a little bread and salt; taking the words of St Paul in a literal sense—*Another who is weak, eateth herbs.*"

During their fasts, they went farther still, and not a few of them restricted themselves to bread and water. The statements of the excellent Abbe Henry, however, as quoted above, refer to their general habits. They entertained with Paul, very high notions of the *inexpediency,* under certain circumstances, of many things not positively and absolutely hurtful.

Many have endeavored to remove the force of Paul's exhortations concerning abstinence, by quoting his predictions in an epistle to Timothy, that teachers should arise in later times forbidding to abstain from meats, as well as his conclusion that every creature of God is good and nothing to be refused, if it be received with thanksgiving But as the author of Bacchus has well said, Paul in these passages merely refers to a *superstitious* reliance on bodily abstinence or mortification, as means of procuring the divine favor, and does not by any means intend to invalidate his former declarations in regard to the propriety and necessity of Christians abstaining from indulgences which would be likely to prove a stumbling block to their weaker brethren. We cannot avoid beholding, if we would, in the very face of inspiration, the broad statement, that it is good neither to eat flesh nor to drink wine if it obviously gives offence, or causes to offend a Christian brother.

ANIMAL FOOD AND DISEASE.

Animal food is said to be one cause of a putrid tendency in severe diseases. Thus Tissot, in recommending a free use of bread, observes that it is not only useful, but indispensably necessary to prevent the putridity which animal food would produce, "if vegetables were not used;" and very ingeniously asks whether the greater malignancy of diseases in the northern parts of Europe, "does not come from their eating more meat and less vegetables," than in the central parts.

He says, moreover, that by the exclusive use of animal food, "free alkali would soon be developed in the first passages, and be followed by all the disorders which it might produce;" among which he mentions various swellings and all sorts of dropsies. He then proceeds to recommend the use of farinaceous substances, milk, asparagus, &c.

There is one well established physiological fact which goes not a little way to confirm these views of Tissot. Chyle formed from animal food, when taken out of the body, putrifies in two or three days, while that which is formed from farinaceous vegetables, may be preserved as many weeks.

But we have the testimony of every observing physician on this subject. Every such individual knows full well that acute diseases are more rapid in their progress, as well as more fatal in their issue, in flesh eaters, than in those who subsist on a well selected diet exclusively vegetable.

Tissot, it is true, is not, in these passages, recommending a diet wholly vegetable, but only partially so. Yet why should a *larger* proportion of flesh meat add to the malignancy and putridity of diseases, and a *smaller* quantity be salutary? Or if otherwise, where is the line of separation? How much vegetable food shall be taken, and how much animal? Will equal parts of each kind be found salutary, and yet any other proportion not so? Or will it be thought that three pounds of vegetable food to one pound of animal is the requisite proportion; while the addition of an ounce more of the one, or an ounce less of the other, will change the whole tendency of things?

Our belief is that the less the proportion of animal food, the more salutary the tendency, both in health and disease, provided the change is made gradually; or what is far better, provided we are trained to such a diet from the first. We do not believe in the necessity to which even Tissot alludes, and of which very many learned men have imbibed a confused idea, of combining the products of the two kingdoms to prevent the danger resulting from the separate use of each. Facts every where and science of every sort are against it.

Let it not be supposed, however, that we rest our belief of the preference of a diet for adults which shall be exclusively vegetable, on the single circumstance of the tendency of flesh to putridity, and the malignity of acute disease. Anatomy, physiology, experience, economy, morality—all have the same bearing in their testimony, as we have elsewhere fully shown.* The bare consideration that it induces the same state of the solids and fluids, in sickness and in health, that wine does, is of itself sufficient to raise, in the minds of all thinking persons, who are not too much enslaved to their appetites, a strong *suspicion*, not to say argument against it.

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* See our work on "Vegetable Diet," p. 250.

RENOVATION OF THE BODY.

We have treated on this subject several times; but the Report of Mr. Mann, from which we have already made copious extracts, contains thoughts on the subject in so much better and more expressive language than our own, that we hasten to present them, at once, to our readers.

"The change of material in the body is almost exactly proportioned to the quantity of pure air breathed, and to the amount of healthy exercise taken—because on these mainly depends the assimilation of the food. Without such change of matter there cannot be any healthy growth; and hence the small bones and loose flesh—as soft and puffy as though it were wind-swollen—of children who are delicately reared. Such children cannot have elastic bounding muscles; for theirs are the old flaccid muscles whose material ought to have been renewed months ago. They cannot have bright eyes and roseate cheeks; for the old, defaced lenses of the eye are still in use, and strong exercise in the open air has never projected the blood outward to fill the vessels of the true skin with the hues of beauty and the glow of health. In regard to those young men who have suffered the misfortune of a luxurious domestic training, who have been taught to disdain labor, and have hardly been allowed to wash their own faces or tie their own shoes, it is often alleged as an excuse for inaptitude, their want of dexterity and resource, in the emergencies of life, that they have never been accustomed or disciplined to contrive and to think, in the adaptation of means to ends, or in tracing relations between causes and effects. But this is far from being all. Their imbecility does not come merely from a want of practice, but from their being obliged to use an old brain, the substance of which ought to have been renovated—all its fibres taken up and relaid—many times, by vigorous exercises, and by a responsible application to some department of business. In such persons, the half-decayed nerves have become almost non-conductors of volition; and the brain, through the want of a renewal of its substance, is too loose and spongy for the manifestation of thought. This organ, too, like all other parts of the body, being dependent upon these changes for its growth, must be small as well as lifeless without them; or its growth will only be in the animal instead of the intellectual and moral regions.

"On this view of the subject may be founded the true philosophical definition of youth and old age. Those who, by an intelligent attention to diet, pure air, exercise and cleanliness, cause frequent changes in the particles of which the body is composed, may be said to be *young* at any age; while those who, by over-eating, uncleanliness of person, and a deficient oxygenation of the blood, whether by breathing impure air, by a compression of the chest, or by inactive habits of life, effect no such change in the constituent particles of which their bodies are composed, may, with equal truth, be called *old* at any age, after the days of infancy have passed. In this sense, it is often literally true that one individual at seventeen, may be older than another at seventy; and some children at seven years of age, are already superannuated."

Nothing can be more true—few things can be more important—than the statements of the last paragraph. Let it be pondered. But now for the penalty of neglect—and a most fearful penalty it is.

"In the account of the miraculous feeding of the children of Israel with manna in the wilderness, it is related that no skill could preserve the heaven-descended bread in a state of purity (with the exception of the Sabbath) but for a single day; and the sacred historian uses very pungent and unsavory words in describing the odious qualities of that which was kept for a longer period. But the manna of the second or of the third day's keeping must have had ambrosial sweetness, as compared with the whole substance and animal economy of those who, by contemning useful labor, or thinking it ungenteel to practice vigorous exercises, fail *to renew, frequently, the whole substance of the body.*"

Mr. Mann is now on a tour of observation to the eastern world, having left his Common School Journal, for the time, in other hands. May he have a useful journey and a safe return; for though we may not accord with him—indeed how could it be expected?—on every point pertaining to education, yet we do feel, and cannot help feeling, that he is doing a great work. And if we have been instrumental, by our labors of the last twelve years—especially by our Journal and the House I Live In—in preparing the public mind to receive his statements, and hear patiently his arguments, we have not labored wholly in vain. We labor to reform the family and the church—God's two primary institutions. The common school is essentially part and parcel of the family; and a reform which shall be effectual in the latter, will extend, inevitably, to the former. A great revolution is begun, and—we repeat the sentiment—it will not stop till Physiology is taught not only in the schools of Massachusetts, but all "over the Union."

CHAPTER OF INTELLIGENCE.

The Capitol Magazine.—We have been favored by Mr. Wilcox, a friend of education at Washington, D. C., with the prospectus of a paper about to be established at the national metropolis with the above title;—to be devoted to education, garden culture, political and domestic economy, literature, &c. Though the prospectus does not so much as contain the *word* health, it is manifest that such a work as is proposed would have a most healthful tendency.—Let us make a few extracts.

"We shall endeavor to show that men are just what their mothers make them—that the destiny of nations and of individuals, morally, physically, politically, is in the hands of *mothers.*"

"We are by education, taste and habit, fond of agriculture, and as a friend of those who earn their bread by their own labor, we intend to devote as much of our paper to their interests as the proportion of our village and country readers will justify. There is no class of men so sure of God's blessing upon their labors, as the honest, industrious cultivators. We will try to teach them how to produce two blades of corn instead of one. The department of field culture is already occupied by several valuable publications; but we do not know of a single work devoted to the subject of plain, useful, practical gardening for the mass of the people—to that branch, therefore, we propose to direct our principal attention. Whoever teaches man, woman or child *to love a garden,* will not have lived wholly in vain."

"The question why one man is rich and another poor—why one is virtuous and another vicious—why one household is the picture of neatness and good order, and another the abode of chaos and dirt, opens a field of inquiry of the deepest interest, and on which but little of the wisdom of man has been as yet expended. * * We have strong desires to shed some light around us, and at least to set men *thinking* on these subjects."

"We shall excuse ourselves from reading, publishing or recommending the whiskey-and-water literature of the age, love and murder stories. Life is short—we wonder immortal beings can devote it to trifling."

It is hardly necessary to add, that such a periodical, established at Washington, and well sustained by an association of good men—one for each of its departments—would be a greater honor, not to say a greater blessing to the country, than any thing else which has emanated from that city during the last quarter of a century.

Remarkable Cure.—An individual in the vicinity of Hartford, Conn., who had for eighteen years been afflicted most seriously with a species of neuralgia, was cured of it about two years ago, by attending strictly, as he believes, to the law of ventilation. He had found our little tract on "Breathing Bad Air." It is worthy of remark, however, that if he neglects to keep up a constant supply of good air by night or by day, in his bed-chamber, or elsewhere, he feels his old complaint creeping on again.

We shall speak, hereafter, of sacrificing—in our "first love" and hasty zeal—the moral well being of an individual to the physical. But the practice of the individual above-mentioned affords a curious instance of another sort of sacrifice. In his determination to sleep with his windows wide open, winter and summer, and to sleep also in the same bed with a young infant, he has been the unintentional cause of giving the child cold, if not of absolutely inducing croup. Currents of air should be avoided, by placing a screen before the opened window, or by the use of blinds.

Visitation of Iniquities.—A case lately occurred in England, as we learn from the London Lancet, in which the contraction of syphilis, immediately after marriage, or the cure of the disease by mercury, or both, was "visited" upon several successive children. Though born small, they appeared healthy till five or six weeks after birth, when they all became affected with a disorder resembling leprosy, of which they died. It should be observed, moreover, that the mother not only recovered of her disease, but remained well for some time before the birth of her first child.—How little are people aware of the evil consequences of transgression, not only after, but before marriage! There is a day coming which will tell a tale on this subject, calculated to make the world, even some of the best portions of it, tremble. Few know, very few indeed—at least practically—that the "wisdom which cometh from above is first *pure*."

Conjugal Abuse.—A female died suddenly, not long ago—and not a thousand miles from this city—whose companion, ignorant or regardless of the laws of health and life, was her slow destroyer. She lasted only to 38 years of age. There was a degree of abuse in the case, which, notwithstanding large pretensions to superior sanctity, was absolutely shocking; but which, if mentioned here, would not be accredited by rational men and women, *if such there are.* Verily there is a reward for the righteous, and a punishment for the incorrigibly wicked. Verily there is a God that judgeth in the earth.

TEACHER OF HEALTH.

NOVEMBER, 1843.

CHILDREN IN FACTORIES.

The following remarks on the evils of employing children in factories at a very early age, are from an English work written by Mr. Gaskell. We have made but very slight modifications of the original article; and those merely to adapt it to American readers. Many of the writer's remarks are as applicable to factory and school children, with us, as to those beyond the Atlantic.

THE material organization of childhood is decidedly unfavorable to labor. The functions of nutrition, which are those peculiarly active, leave but little of either nervous or muscular energy, beyond what is required for their due supply. The whole body is in a state of rapid alteration; full of muscular excitement, and requiring long periods of repose. The constitution at large is very excitable, abounding in vitality, and prone to irregular action. The osseous system is incomplete; its structure, as yet, being in a very great proportion cartilaginous, and hence, beautifully adapted for accommodating itself to the growth and extension of the body. It is, however, soft, yielding, bends beneath pressure, and is easily made to assume curvatures and alterations in direction, incompatible, more or less, with the natural arrangements, which are, in all instances, full of harmony and architectural and mechanical beauties. The long bones, those of the arms and legs, do not become completely ossified till the body has attained its full growth. The flat bones—those of the head, pelvis, &c.—become hard sooner, serving, as they do, for the walls of cavities, or supports for delicate and important viscera, essential to life.

It will be useful to trace the progress of bone from its mucous state to its complete perfection in after life, as it bears very considerably upon the fitness or unfitness of young children for labor, and will sufficiently demonstrate that mechanical causes may have a very important influence upon its due development.

The first stage in which the anatomist can detect bone, or rather the rudimentary parts which are subsequently to become the depositories for bony matter, is at a very early period—at a time when the whole is a mere mass of transparent matter, which is so soft and unresisting, that it yields beneath the finger like a firm pulp.

At this time, however, the forms of the bones are discernible, holding their proper respective positions in the frame. Gradually they become firmer—more cartilaginous—specks of bony deposite appear in the centre of the long bones, and in one, two, or more places in the flat bones.

From these specks, as from centres, radiate osseous fibres towards the extremities of the various separate portions, into which the long bones and the flat bones, forming the cavities, are divided. In the long bones these osseous streaks are longitudinal, running towards their extremities; in the flat bones, they take a starlike course, diverging towards their edges; and in the short bones, such as the bones of the hand and foot, they proceed from the interior to the surface.

Previous to the deposite of bone, the cartilaginous parts were nearly without color, just indeed tinged with a yellowish hue; but now a red dot is perceived in the point where the bone is forming, and blood vessels gradually show themselves.

This bony formation steadily progresses till the period of birth, and has generally touched, in one or more points, the extreme length of the long bones, and the edges of the flat and small bones. But the whole is very far from being complete. The heads or extremities of the long bones offer distinct points of ossification; in the flat bones—those of the head and pelvis and shoulder blades—several distinct points are also often found ; each forming a small centre for the divergence of similar streaks to those of the primary ones.

The bones of the head, which in later life become one continuous case or surface, are at this period divided into several plates, that gradually stretch out their ossific rays, and indent into the edges of those next them, forming notches, or teeth, which dovetail one into another, and finally make a very firm and immovable union, the bone breaking before these give way, as the edges are thickened purposely to strengthen and fortify this point of junction.

The Divine Architect, whose omniscience has contrived a mechanical apparatus like the human body, has also, in the mode of its growth, and the periods appointed for the completion of particular parts, clearly indicated the order in which their functions should be called into active employment. Respiration being immediately essential to the new-born creature, the points of bones to which the muscles are attached chiefly concerned in that office, are the very first to show signs of ossification. The collar bones and ribs also harden very early, and at birth are sufficiently firm to afford unyielding fulcra for them to act upon. The spinal column shows early marks of ossification, as it is in a considerable degree interested in the same function ; while the extremities of the long bones and the edges of the flat bones are still incomplete, and the process of hardening in the small bones of the hands and feet is hardly commenced.

At the period of birth, the osseous system is a great series of detached portions of bone, incapable of supporting the soft parts without yielding beneath their weight—the connecting medium between them (cartilage) is flexible; the only portions which have assumed a very decided formation being those connected with respiration.

Month after month, as the infant acquires muscular vigor, the bones solidify in ratio as the peculiar organs are called into play. Point after point hardens, and is connected with the shafts of the long bones, or firm ridges spring up along the surface of the flat bones, giving origin or insertion to the moving powers which are destined to enable the child to perform the actions of locomotion lifting weights, &c., &c.

It is not till complete growth has been attained, which is from the seventeenth to the twentieth year, that all the bones are completely ossified; and till this period they are more or less liable to give way under continued pressure. They have, however, assumed a very considerable firmness of structure prior to this, and little danger need be apprehended of evil consequences from any common labor or exertion which the purposes of life require.

The system of bones—the skeleton—is the basis or frame-work on which all the soft parts are, as it were hung. It sustains their weight, affords points of support for muscular action, and by the beauty and order of its articulations, is capable of assuming a variety of directions, while its symmetrical proportion is most perfect, and admirably adapted for the packing and convenient arrangement of all the numberless components of which a man's body is made up.

During the growth of the child, then, its bones are, to some extent, soft and yielding—a circumstance familiar to many mothers, in whose infants the bony structure has not, from some fault in the peculiar nutrition, gone on apace with muscular development; and which, by inducing the child to support its own weight upon its feet, its legs give way beneath it and bend out—a very common case in scrofulous families.

It has been said that the child's system was one full of excitement, of rapid changes in structure, and that its sensibilities were acute. The world brings to the infant, for many years, a constant succession of new sensations, and its activity, its variableness, its jocund laugh, its quiet repose, are all evidences that, like the young of other animals, its life was intended by the Creator for unrestricted bodily enjoyment, for to it motion itself even seems a gratification.

No one familiar with the wants and habits of a child, is ignorant how irksome confinement is to it—how utterly unfit it is for settled occupations—how listless and heartless it speedily becomes when shut out of its instinctive mode of life—how soon it droops and pines, and loses the vigor and freshness of the wild flower.

Whatever causes tend to derange digestion, must of necessity interfere with nutrition; for in fact the terms may be considered as almost synonymous. The growth of every part depends intimately upon this process being well performed. Whatever interferes with this, deranges the whole circle of the animal economy; and if continued, will lay the foundation for a series of irregular actions, which may either run into scrofula, if such taint already exists, or may bring about independently of such taint, the same or some analogous affection. Whatever vitiates this series of operations—and it is liable to be vitiated by many causes—puts the whole animal machine out of equilibrium; and irregular formations, strumous swellings of the heads of the long bones, as at the knees, ancles, elbows and wrists, or a similar train of evils in the glandular structure, evidenced by swellings in the neck, terminating in sores difficult to heal, or of the mesenteric or other glands of the abdomen, or of derangements of the mucous surface of the mouth, eyes, breathing apparatus, bowels, &c. &c.—all these are results, more or less marked, of any continued derangement in that most important function of childhood—nutrition.

Light, air, recreation, freedom from toil, proper clothing, wholesome food, attention to the bowels, &c., are all essential to this function being well performed. Children placed even under the most favorable conditions, if deprived of their necessary amount of unrestricted physical enjoyment, show very plainly their want of it. In fashionable boarding-schools, and in private families, where tuition is commenced early, and where little proper exercise is taken, but where every attention is paid to food, &c., the pallid face and spiritless demeanor of the children, very soon show that nothing can compensate for the abstraction of their necessary stimuli.

The factory child, from the very earliest period of its existence, is, in large towns, subjected to all the necessary causes for the production of the physical evils resulting from derangement of the digestive organs. Its food is coarse, and the times of feeding irregular; it is exposed to cold, is ill clad, and is allowed to be filthy. It inhales the impure atmosphere of a badly ventilated and uncleanly house, and the equally impure one of an unpaved and undrained street; is allowed to get wet; goes barefoot; no attention is paid to its dietetic comforts; and consequently vast numbers die very young. Even the remainder who live exhibit symptoms that they have suffered from neglect and exposure. They have pale and flaccid features, a stunted growth, very often tumid bellies, tender eyes, and other marks that something goes wrong. The effect of all the other causes is aided by the abominable practice so general among this class, of cramming their children with quack and patent medicines to quiet their irritability, increased as it is by their digestive derangement, or the equally pernicious one of giving them gin for the same purpose.

In consequence of the absence of the mothers, these children are entrusted, in a vast majority of cases, to the care of others, often elderly females. These women often undertake the care of several infants at the same time; the children are restless and irritable from being deprived of a supply of their natural food, (as when the mothers suckle them, they can only perform that duty in the intervals of labor,) and the almost universal practice among them is to still the cries of the infant by administering opiates, which are sold for the purpose under several well known and popular forms. The quantity of opium which some children, from habit, become capable of taking is almost incredible, and the effects correspondingly destructive. Even when the children have a healthy appearance at birth, they almost uniformly become in a few months puny and sickly in their aspect, and many fall victims to bronchitis, hydrocephalis, and other diseases, produced by want of care, and the pernicious habits we have detailed. We may mention, also, that spirits, particularly gin, are given frequently when the infants appear to suffer from pain in the bowels.

The child is ill fed, dirty, ill clothed—exposed to cold and neglect, and in consequence more than one half of the offspring of the poor die before they have completed their fifth year. The strongest survive, but the same causes which destroy the weakest, impair the vigor of the more robust, and hence the children of our manufacturing population are proverbially pale and sallow, though not generally emaciated, nor the subjects of actual disease.

Whatever tends to disturb that function, the products of which furnish the materials for the building up of the body, or which alters and depraves those materials, must necessarily impede and retard the completion of the healthy structure of the system. In childhood, much has been done in these respects ; muscles have to be strengthened and brought into use; the bony fabric solidified; growth carried on, by the deposition of new matter in every portion of the body ; preparation made for sexual development: all these keep the feeders in constant action. The vessels which are to be the final depositories, are all connected with the alimentary canal: these convey the chyle they have eliminated from the food. If, however, this chyle is imperfectly formed, which must inevitably be the case when digestion is impaired by the causes already mentioned, it cannot fulfil perfectly its destined offices in the system—growth is retarded, and particular structures unfinished.

The formation of bone—the necessary earthy deposite upon which its hardness depends—is one singularly under the influence of the digestive operations. Ricketty children are ever wrong in this respect: the food they take furnishes but little nutriment; their bowels are disturbed; assimilation goes on imperfectly ; all the processes connected with absorption and deposition are irregular, and do not preserve that reciprocity of action, that balance of quantity, which is necessary for proper growth.

Without going more diffusely into the pathology of the two diseases, scrofula and rickets, which are in their origin clearly traceable to disturbed digestion, it may be sufficient to state, that both, when they have been fairly established, seem to be transmissible from parent to child—to become hereditary. By the term hereditary, however, when applied to diseases, whether mental or physical—it must be understood only in a general sense—as meaning that a parent endows his offspring with certain peculiarities of constitution, certain tendencies to take on diseased actions—not that he transmits the disease in its distinct form, but that he gives a liability to have it called into action by causes which would not develope a similar disease in a child descended from parents perfectly free from any such taint. With scrofula this is decidedly the case—scrofulous parents very frequently having offspring with all the traces of its peculiar diathesis—light eyes, fair skin, &c., &c. With rickets this transmission is less observable, probably because its incipient stages are not so strongly marked.

The factory child then, from its birth is placed under circumstances certain to deprave its nutritive functions, and to produce effects injurious to the healthy stamina of its physical organization. Its soft parts become flabby, relaxed, open to disease; its osseous system becomes firm very slowly and irregularly, yields to superincumbent weight, producing deformity more or less connected with important outlets or cavities.

But farther than this, the child which is descended from parents who have themselves been subjected to like causes of physical debility, must have an organization weakly from its very origin: must have inherited, to some extent, their debilitated constitution, and in consequence be much less able to resist the influence of the unfavorable conditions to which it is exposed subsequent to birth.

This condition, it must be constantly borne in mind, has nothing to do with labor—as yet the child has undergone none: it has been allowed to run wild, half clad and half starved. It is of the utmost consequence to a correct understanding of the question of infant employment, that this preliminary state should be properly considered and correctly appreciated. It would, indeed, be a monstrous perversion of every thing like justice, both to the masters and to the system of factory labor, to burden the one with the moral responsibility of this prior condition, or the other with all the results for which it paves the way—a state, be it remembered, little likely to be ameliorated or improved, if the child were permitted to remain in idleness at home, since it would be still exposed to the same causes of physical and moral depravity. If, indeed, it could be shown that abstinence from the mill would, to some considerable extent, give it an opportunity for regaining, during youth, what it had lost during infancy, a powerful argument would be afforded for government interfering with what the abolitionists of this species of labor do not hesitate to term infanticide, and compare it to the Hindoo Gangetic superstitions, and the Chinese systematic child-murder. A perversion of words, however, is no argument; it may be ingenious, and serve party purposes, but it leaves the question at issue precisely in the same state in which it found it.

There can be no question that a child of nine or ten years of age, if it has been placed under circumstances to permit the healthy development of its organs, is capable of performing a little light work. If a child get over its fifth year, even when it has shown symptoms of slight scrofulous affections, it generally pushes forwards, and does well, providing that it is properly nurtured, and is well fed and well clothed.

A child from an agricultural district, eight or nine years old, blooming with rosy health, full of vitality, is transported to town: its parents are compelled to leave it while they prosecute their work at the manufactories; it is exposed to miasmatic evaporations, shut up in a narrow street, its home is damp and cold, its food poor and badly cooked: in a few months, from the force of these circumstances, the Hebe-looking child has become pallid; its muscular system loses its tone; but it seldom goes down below this, its bony fabric having attained already so much firmness and completeness of ossification, as to prevent it from yielding to any very great degree. In consequence, however, of the lessened efficiency of its digestive apparatus, it is much more liable to chronic diseases, glandular enlargement, irregular developments, at the expense of the whole system; and this train of circumstances is independent of labor, but is brought about simply by change of locality, the altered habits of its parents, and its damp and unwholesome home.

The difference between the child born and subjected to these mischievous agencies, and the one born under more favorable auspices, in the influence of which it has lived till seven years of age, and then brought under the same train of mischiefs, as to diet, &c., when they are examined at nine years of age, is less striking than would have been previously supposed from a comparison of data. Externally they present but few points of dissimilarity, whether in their physical structure, or their morals: but a more attentive inspection will very readily enable the inquirer to ascertain that, in their several capabilities of bearing labor, or continued exertion, they are widely disproportioned, the preponderance of ability leaning vastly to the child whose prior healthy development had enabled its organs to make a decided progress.

In this instance, its nutrition, for several years, had been unimpaired; its long bones had become in a great measure ossified; the whole increments of its system had been eliminated from a healthy source, through a series of vessels equally healthy and capable of performing their functions, and a degree of growth established, which no subsequent derangement could materially injure or deface. Not so the child whose destiny has fixed it there from birth; not only is its muscular system flaccid—supplied with thin watery blood; its mucous surfaces unhealthy; its glandular system deranged ; but the ground work upon which these are built, the frame upon which they are arranged, is incomplete in comparison. The bony fabric has had no opportunity for becoming properly solidified—contains as yet too large a proportion of cartilaginous matter ; so that the child whose early years have been passed in healthy localities, and had home-tendance, is far more advantageously framed for work, and much less liable to the yielding of its osseous supports, than the child differently circumstanced.

QUACKERY.

We have said elsewhere that quackery—universal as it is—destroys more lives than famine, pestilence and the sword. Yet if this were all—if it did no more than to take away a few hundred thousand lives every year, it would be an evil comparatively tolerable.

But for every individual who is actually destroyed outright, as the direct or indirect consequence of quackery, we have several who are more slowly murdered ; or rather who having their health and happiness broken up by medicine, drag through a multitude of years of suffering, and perhaps even attain to old age.

Now we call a violent death an evil—and such is the death we most commonly witness *—yet a large number

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* We have often been reproved by our friends for saying that few people die a natural death, and that their very throes or spasms prove that they die from violence. And yet the learned Dr. Gregory, of Edinburgh, who was not at all addicted to the use of extravagant expressions on this subject, asked, nearly a hundred years ago, the following question—" Is it a necessary consequence of our superior faculties, that not one in ten thousand of our species dies a natural death ? "—See his " Comparative View," page 13.

of these violent deaths are the consequence of quackery. Still death, we repeat it, even by violence, when it comes suddenly, bears no sort of comparison with the misery of being ten, twenty, thirty, or perhaps fifty years in dying.

But what gives us the most pain, in connection with this subject, is the fact that people of the first standing in society, and often of the best sense and greatest general intelligence, are not unfrequently as much given to quackery as those who are more ignorant and less influential.

A gentleman of good sense and information called on us once, to ask advice about his son. A year before he had been badly scalded, and for some time, his life had been reckoned in danger. His general health, however, was gradually restored; and for some months past has seemed to be perfect. His appetite, digestion, sleep, &c., are all apparently correct. But the sores, which were deep and extensive, have never yet wholly healed.—The question was what could be done.

On inquiry, we learned that the child had been plied, for the greater part of a year, with the most active ointments which the materia medica affords; and even at the direction of some of the most distinguished surgeons and physicians. But we also learned that at a few intervals, other *simple* applications had been made at the suggestion of the neighbors.

Our inquiries, and the father's replies resulted in a full conviction, in our own mind, that what had operated most to prevent the healing of the boy's wounds was the constant application of strong and active and stimulating ointments. Though they possessed no power to effect a cure, they had power enough to prevent, by their irritation, an entire healing. The great trouble was they had done too much; and that what was now most needful to recovery was "letting alone."

There was, however, one difficulty. When the simpler, less active applications had been for a time made and the process of healing seemed to be going on well, the great itching of the sores would induce the boy to rub them, especially in his sleep; and this would bring them back again to their old condition.

In giving our advice, which was to let the parts wholly alone, if possible, and to devise some method to prevent the boy himself from rubbing the tender surface as soon as it began to heal, we were interrupted by a tall ministerial gentleman who having heard a part of our friend's story, desired to give his opinion. He did not wish, he said, to interfere with another profession; but experience had taught him something which he felt it to be his duty to communicate. "Borax and marsh rosemary will cure your child," said he to the gentleman.

Roused by the hope which the high pretensions of quackery are wont to inspire, our friend turned to the minister, and made a few inquiries.

"Do you feel confident that the medicine you mention will be good for my child?"

"I know it will. It will cure him without a doubt."

"Borax and rosemary, you say, do you?"

"Borax and rosemary. Borax, you know, has always been famed for its healing properties."

"How should it be used?"

"You must make a tea of the rosemary, and dissolve in it some of the borax."

"And wash the sores?"

"Yes, and let the child take some of it, internally, at the same time, in order to guard the stomach."

"You have seen it tried, in such cases, have you?"

"Indeed, I have often; and it is one of the best things in the world. It will do your work for you, there can be no doubt. My son had an eruption on his skin, which had continued for almost a whole year, and had baffled every attempt of medical skill, but which was at once cured by this excellent preparation; and several of our neighbors have made trial of it with similar success."

The minister was sincere; of this there could be no doubt—as little could we doubt the truth of his story. He had unquestionably tried the medicine, in his child's case; and the eruption had unquestionably disappeared. But whether it had disappeared because it was just ready at that time to be dispelled by the force of nature, or because it had found a momentary relief from the interference of foreign and useless aid, or because the medicine *happened* to be the right one, or from a combination of these causes, and from others united with them, it would be more difficult to determine. But the gentleman had no doubts on that point. He was sure it was the borax and rosemary that did the work.

But the best of the joke was that because the medicine had cured the minister's child and the children of his neighbors, of an eruptive disease, it would therefore cure the long standing ulcerated spots on the scalded skin of the child of our friend.—What reasoning this was! What penetration! What freedom—as became a learned man—from quackery!

It is, however, too serious a matter for joking; and we return to the sober merits of the case. The minister having given his opinion and advice, turned to us and inquired what we thought of it.

Why, sir, we replied, there can be no doubt of the salutary effects of borax, in certain cases; and perhaps it was the instrument of cure in the cases which have fallen under your observation. But the case of our friend's child is a very different one; and the fact, *if* a fact, that it was successful in the one case, will by no means prove that it is indicated in the other. We who have heard a full account of the whole case, were coming to a conclusion, just as you spoke to us, that what our friend's child needs is to be let alone. He has been doctored too much. The object now should be to avoid all foreign interference, and if possible, keep every thing but air away from the diseased surfaces, and leave them to get well of themselves.

Our views might be correct, the minister said, but it seemed to him that so simple a remedy as he proposed was worth trying. It certainly could do no harm.

Here we left the company. We did not manifest any indignation, but it was difficult to refrain from it. When we meet with these things from the ignorant—from whom it is natural to expect them—we find in ourselves no sentiments but of sorrow and compassion; but to find those who set themselves up and are set up for teachers, so completely given over to quackery, is quite too much. There certainly is blame somewhere. Ministers of the gospel have no right to be thus ignorant of the laws of life. Nor have those who are set over our theological seminaries any right to permit it in the students who are committed to their care for instruction. Luckily, however, for the happiness of the human race, this subject is beginning to receive a little attention; and we hope that in another generation there will be, in this respect, a salutary change.

Our own conduct, in this case, was not without blame. When the minister asked what we thought of his prescription, we ought to have repeated distinctly our views of the whole matter. But we had not courage to do it; and so left the matter in a wrong train. The father probably proceeded to torture his son, inside and outside, with borax; but the sores, it is most likely, remained as they were. Nor is this all. The minister, unrebuked for his folly in meddling with a subject which was out of his province, and of which, moreover, he is most deplorably ignorant, will be just as ready to prescribe again, should there be an opportunity, as he was to do so in the instance in question.

We are grieved at our own timidity and irresolution, and are fully resolved not to indulge it more. It is true, we have made a similar resolution before, on a similar occasion; but we had not then so many terrible facts to drive us to the necessity of keeping it as now; at least, we had not so many *by one.* Nor had we as strong a determination as now to seek strength and aid from above. May that strength and aid be afforded; and may we learn to use it in all meekness and wisdom.

This propensity to quackery is not to be eradicated in a moment; no, nor even in a single generation. It is too intimately blended and too closely intertwined with all things else. It is seen every where; and in almost every thing which is done. We find it occasionally even in physicians. We find it in ourselves. We find it existing every where, not only in relation to health, but all other matters. There is quackery in law and theology as well as in medicine.

We must begin at home. We must divest ourselves, as much as possible, of the darkness of ignorance and superstition. We must let in upon our minds the light of true science. We must study the laws of life. We need not study the laws of medicine, nor those of disease. Let us attend to the laws of food and drink, and sleep and exercise, and dress and health; and thus prevent the use of medicine, and the pains of disease.

We have here—in the last paragragh—hinted at a great mistake, which prevails every where in the community. People who begin to awake in regard to this subject, and get a leisure hour for the purpose, immediately go to reading about disease; and the next thing we know of them is that they are watching their stomachs and tending their nerves. They have this or that disease; or at least they have it in its incipient stages. Or if they have it not now, they are afraid they *shall* have it. But the study of anatomy and physiology, in such works as are brought down to their capacity and rendered sufficiently interesting, will never have this effect.

Let us then study physiology. Let us study it; not indeed to know any thing about disease, except so far as is necessary in order to keep clear of it. Let us study prevention, and not cure. Let us study how to be well, and then we shall not so often be sick. Let us study how to live well, and then we shall, as a general rule, die well. Let it be our object to live naturally, and then we shall seldom die violently.

One thing more. Let us study the laws of life, not merely that we may be free from pain and disease, but that we may enjoy an increase of positive happiness. The *beau ideal* of health has seldom, if ever, yet been attained. There is no person so healthy but that he might be healthier, and consequently happier. There is no person so vigorous but that he may acquire an increase of vigor; especially from birth to middle age. Even the centennarian, in the extreme of decrepitude, may improve his condition by prompt and entire obedience to the laws of the Creator.

We know this last doctrine will be new to many, and will be rejected by some; but we know, too, that they will be least likely to reject it, who have most examined the subject. It is a great truth, however; and will be ultimately received as such. And when it is once received and acted upon, its effects will be most happy.

DEATH IN THE GALLIPOT.

In a London Magazine for 1825 is a curious article, with the above singular title, which we have thought it not amiss to copy for the benefit of our readers of the present volume. The evil so loudly complained of in London, more than a dozen years ago, is common, in a degree at least, every where among us. There are, at almost every corner, apothecaries' shops and ignorant apothecaries, and labels and prescriptions in Latin; and we have among us, every now and then, blunders and poisoning and death.—But let us come, at once, to the London article.

"Not a week passes, in which some one is not poisoned, by 'a mistake in the medicine,' as it is genteelly and tenderly called, in this age of politeness. In plain terms, the man is poisoned, killed, murdered, by the blunder or negligence of the apothecary, the chemist, or the chemist's boy. And the people submit to all this as quietly as if it was part of the necessary and irremediable law of Nature.

"Death in the pot" is a jest to these "deaths in the gallipot"—in the gallipot, in the phial, in the pill box, in the elegantly folded and flattened bit of paper, which issue weekly from the apotheca of drugs and destruction that haunt every alley, every street, and every corner, illuminating with their portentous and ghastly lights the circumambient darkness. You think, reader, that what we say is rather "splenetic," or "rash :" not at all—suffice it that we *know* it. And so does the public; but it does not know the half, the tenth, the twentieth.

Oxalic acid for salts, saltpetre for salts, butter of antimony for antimonial wine, ammonia embrocation for a draught, laudanum for any thing; of these, or some of these, the public knows every month, or every six months; but it does not know them all, and it does not know of many more, and it does not know one case in ten, twenty, a hundred, where these "mistakes" occur, where people are poisoned, killed, and buried, and where the disease or the doctor, not the apothecary nor the chemist, gets the blame.

It is a crying evil, and it demands a remedy. It is not a month since a lady of rank was killed by swallowing ammonia prescribed to be used externally. It is not much more since Mr. Owen, the artist, was poisoned by laudanum, similarly misnamed. The fate of the late Primate of Ireland is not forgotten. But what are these to the crowds that never come to light? In our own experience, and a limited one it has been, we have seen twenty such cases for one of which the public has known.

We have inquired among our medical friends for testimony, and we have found it; testimony that would make your readers shudder. And those friends have scarcely exempted, among them, a man, or a shop. From one or other we are assured that such mistakes have happened in almost every one of the greatest shops in London. But we are desired not to give names, and we obey. And yet this seems a specimen of that false delicacy which would rather that the innocent should suffer than that a culprit should meet his just reward.

And from the evidences which we have collected, we have also found errors proving that nothing but the extremest ignorance or the grossest carelessness could have committed them; substances substituted for others the most perfectly dissimilar, and the misplacement of labels where it would have been supposed impossible to misplace them.

What else but an utter ignorance of the nature or aspect of these dangerous substances could compound a draught of arsenic and water, could substitute saltpetre cast into bullets, or sal prunella, for common salts, antimonial powder for ipecacuanha, muriate of antimony for antimonial wine, laudanum for almost every thing, and much more that we need not enumerate. One of our evidences has informed us that in a medicine chest containing six bottles, four were wrong, and that from the very largest shop in London.

Sickness is a sufficiently serious evil; and it is hard to think that, like poor Owen, we are recovering from it to die of the remedies. Why does not the legislature interfere? The apothecary was originally the dispenser of drugs, and often the maker. He understood his trade, and attended to it. So he does still in France and elsewhere.

In England he must be a physician, forsooth, a physician without education or study, without either practice or experience, than that of having folded papers and tied pack-threads for seven years; and his own trade that which he has underaken to perform, a most dangerous trade, is left to mean hirelings, and idle boys, ignorant and careless, often so careless that they will neither weigh a solid nor measure a liquid. The chemist, as he is called—chemist indeed—steps into the place of the apothecary, and he too by degrees becomes a physician, and leaves his business in rotation to similar hands. Both study to procure assistants or workmen at the lowest wages, and the consequences are obvious.

The custom of writing prescriptions in Latin, and in some measure, of naming substances in abbreviated Latin, is perhaps a minor evil, but it is one. The hireling cannot read Latin; and though he may discover the names and the substances, he often cannot translate the directions to the patient. Surely these at least might be given in English, as is the case in Scotland."

We are unwilling to drop this subject without relating a circumstance which took place under our own observation, and which left an impression that will not be easily effaced.

We had visited a sick patient and ordered a large dose of calomel, and some very small doses of tartar emetic. Before we left the house, a boy had been sent to the apothecary's; and on going home we met him coming with the medicine. As the case of the patient was somewhat critical, and as we knew that the apothecary was by no means a scientific man, and sometimes employed a boy who knew much less about medicine than himself, the thought struck us to dismount from our horse and examine the parcels. And judge, reader, if you can, what was our mortification to find that the tartar emetic had been put up in a large dose, and the calomel in small ones, so that instead of a gentle evacuation of the bowels, by the single dose of the calomel, to be followed by the small doses of emetic tartar to keep up the action, the patient would probably have been destroyed by the violent action of the latter; or if not, would have been "finished off" by the very small doses of the former. So dangerous is it to trust to ignoramuses for apothecaries!

SACRIFICING THE MORAL TO THE PHYSICAL.

Mankind are prone to extremes; and nothing is more common than to see the truth of this saying of antiquity fully illustrated in the management of those parents who have been but recently awakened to the great importance of physical education. Instead of giving it the place it deserves, they exalt it, for a time, to a place which it does not deserve. In other words, they overlook the moral for the sake of the physical treatment of their children; and not a few even go so far as to sacrifice their moral well being to obtain an end which zeal in a good cause has unduly magnified.

Some parents, for example, who are awakened to the importance of cold bathing, not only bathe themselves daily, which is well, but they are unyielding in regard to their children—even the very youngest of them—as if their eternal salvation was to be jeopardized by the omission of a single bath, or the exaltation, by only a few degrees, of its temperature. Now there is certainly much importance to be attached to *habit;* and the omission of one day is likely to be repeated the following day. Yet there are times when it were better to omit it for a single day or so. Not, to be sure, when there is no reason to be assigned, but that the child demands it. But there are circumstances when a child's temper—owing, perhaps, to ill health, or a momentary disappointment about something—will inevitably be injured more by our perseverance, than the body would be by omitting the bath. Or a state of body may exist, which will not secure the necessary reaction; and instead of being joyous and cheerful after it, the child may be chilly, unhappy, depressed, or even irritable. Great pains should always be taken to have children happy in the use of the bath, if possible. We may be decided and persevering, and at the same time kind and playful; and it is certainly desirable we should be so.

Some there are, moreover, who without regard to circumstances or feelings, will drag their children from bed. Surely, they seem to say, if early rising is so conducive to health as medical men say, our children should learn the habit from the very first. Here again, too, in order to secure a valuable physical habit, and for want of a little *suaviter in modo*, they push their determination so strongly as often to ensure ill temper the whole morning, if not the whole day. They sacrifice the moral well being of an immortal, to that physical well being, which however important in itself, was designed only as the handmaid of the former.

We have no fears that too much attention will be given, by parents and teachers, to physical education, provided they do not sacrifice, for the sake of the body, that higher nature for the sake of which the body was made and furnished. But we do and must protest against that pseudo-reform in education which is becoming so common—which takes for granted the right to neglect the soul because the body is cared for, and in the same proportion. Let all the laws of the lower nature, we repeat it, be obeyed; but not at the expense of the well being of the immortal spirit.

LABORING AT THE TOP OF OUR CONDITION.

"I KNOW of some men," says Dr. Jarvis,* "who make it a rule to work their horses at the top of their strength, using them only in their fullest flesh and spirit, and resting them before much fatigue. But they work, themselves, at the bottom of their strength. If they rest, it is only when nearly or quite exhausted, and they return to action as soon as they gather power to crawl to their labor. A provident economist, in this town, was very careful in the usage of all his materials. He told me often, with much apparent satisfaction, that his chaise had lasted more than twenty years, and did all the family business. But he never allowed it to be used in the mud or rain, or on slight occasions, and always drove very cautiously; for though these might be of no great consequence immediately, yet they all, put together, wore upon the chaise, and would hasten its final destruction. At other times he told me that "he always considered all he could get out of his own body, by hard work, extra exertions, or night labor, as so much clear gain."

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* See a letter from Dr. Edward Jarvis, of Concord, Mass., published at page 89 of the Sixth Report of the Secretary of the Massachusetts Board of Education.

We have urged these views, in other language, again and again; but as we have great reason to fear, with very little effect. We have insisted on early rising, and on economizing the forenoon with great care, because the morning or forenoon is the best time for every thing. It is the best time for devotion—the best for study—the best for labor—the best for amusement.

Is it asked what we are to do when at the bottom of our condition, if nothing should be done except when we are at the top of it? We reply by asking what is to be done with our beasts of burden, in similar circumstances. What, indeed, but to let them rest? We had almost said, *let them vegetate.* The less they do, say or think—the more, in one word, they approach to a state of mere vegetation, the better.

He who follows out this great law of health, in conjunction with the other kindred laws, will find himself reaching the bottom of his condition later and later continually, till his morning feelings will last nearly all day; and in some instances *quite* all day. Some of our readers will remember a few stanzas of a former volume of this journal entitled, "Morning all day," by the editor. There was more truth in them than poetry; and we most devoutly wish we could live to see the general belief prevail, that "morning all day" may be attained. But it is something to "die in faith." A state of things of which we are quite sure we see the harbinger, will inevitably arrive; happy is he who does something to hasten it.

It is sometimes said—and not without a measure of truth—that mankind, especially the "yankee" portion, are greatly prone to have their hobbies. There is even some danger that physical education and physical improvement will be made, for a time, the popular hobby. The great evil of all this is, that no one will ride his hobby long at a time. Our choice would be to have the public attention turned to this subject *just as fast as the public mind is enlightened*, and by no means any faster. We do not wish to see an opinion, or practice, or custom—any more than an individual—lauded or carried on men's shoulders to-day, only to be execrated or *carried on a rail* to-morrow.

CHILDREN'S DISEASES.

Diabetes, and mere incontinency of urine, have been so frequently confounded, in the treatment of young children, that we have adopted a distinction in our work entitled the "Mother's Medical Guide," as follows:

"This subject has usually been treated under a single head; that of diabetes. But there is an affection very common among children, which though it resembles diabetes, is as different as any thing can be. I do not say it is entitled to the name of a disease; but I have given it a name for the sake of convenience.

Many children acquire the habit of voiding their urine too frequently, on improper or unexpected occasions—a consequence of sheer neglect. Mothers and nurses should attend to their wants seasonably and habitually. Children may, at a very early period, be so managed as seldom to wet their clothes or their beds. That it costs some trouble, I freely acknowledge; but it also costs trouble to be obliged to spend half one's time in drying clothes and beds, from the time a child is born till he is twelve or fourteen years of age.

If those who have the care of children will early place them on a "chair," at such times as they suppose nature is about to utter her demands, or might, with a little urgency, be made to utter them; and if, as soon as they have no further occasion for remaining there, they are taken away; it will not be long before the desire to attend to the calls of nature will, by association, remind them of the place, and they will either go thither, or manifest a desire to do so, and even wait a little while because they are not in the right place. This is no mere theory; there are many mothers who have tried and proved the plan I recommend, till it has become a successful and well-tried experiment, rather than a theory.

Again; if they are taken up as soon as they wake, and if their nap has been short, it will often be found that there is an occasion for the "chair," and that if the child is carried to it, the call will be obeyed. It is true, the matter must be attended to the instant the child wakes, to insure success. I said if the nap were short; for it would be very unreasonable to expect little children to lie unattended to the whole of a long night. They should be taken up, after they are a year old, once in three hours or so; and till they are four or five, at least once a night. With this precaution—I speak here, again from experience—there is no need of having the bed clothes wet, nor of perpetuating a dirty and troublesome habit.

In genuine diabetes, there is not only an incontinency of urinary fluid, but a remarkable change in its character and quantity. The quantity in twenty-four hours is often enormous, and a just statement of the case would not, by many, be believed. In some remarkable cases of adults, it has fallen but little, if any, short of two gallons in twenty-four hours. Its odor resembles that of milk, or more strictly, perhaps, fresh animal broths; it abounds largely in saccharine matter, or sugar; and its color is a pale straw color, approaching to green.

In children—for it is common to children and adults—it seldom makes its attacks till after the child has been weaned. After it has appeared, the subject of it not only loses the usual flow of spirits, but becomes languid, and begins to lose flesh, and the skin to become by degrees harsh, dry, flabby, and hot. At first the bowels seem unaffected, but these at length become disordered. There is, moreover, from the first, a most intense and sometimes distressing thirst. Finally, as too often happens, the brain becomes affected; headaches and vertigo come on; and the child dies stupid or apoplectic. Or, in other and more prolonged cases, the termination is in a remittent fever, followed by consumption or dropsy. I have been thus particular in regard to the symptoms of this disease, not because mothers will very soon be able to manage it, but because it is usually beyond their reach, and, therefore, it is desirable they should be able to distinguish it from mere incontinency of urine, and govern themselves accordingly.

It may be well to allude to its supposed causes. These, according to Dr. Thomas and others, are strong diuretic medicines; intemperance in eating and drinking; *sensual indulgence;* severe evacuations; immoderate use of acid drinks; excessive labor, joined to a poor diet, especially when with the latter, there was a free use of condiments; and whatever, in short, tends to debilitate or weaken either the mind or the body. Some of these causes are not likely to have place, of course, in infants; nevertheless, it is well the mother should read over the whole list.

When this disease has come on a little while previous to some important change of life—such, for example, as puberty—there is reason to hope that with this change it will disappear. But in general it does not pass away so easily.

The treatment of many children affected both with this disease and incontinency, is revolting to every sentiment or feeling of humanity. They are blamed for what is the effect of disease, and for what they can no more help than they can help having the headache or a sick stomach, when the latter has been abused or over loaded. Better by far, and more humane, would nurses and mothers study the laws of habit in respect both to healthy and diseased action."

CHAPTER OF INTELLIGENCE.

Cure without Medicine.—The London Gazette says: "Recent pathological investigations tend to prove that phthisis (consumption) is not so invariably fatal as is generally supposed." It states also, that the investigations of M. Boudet, of France, " lead him to believe that recovery is possible at any period of pulmonary consumption; but that nature, independently of remedies, works the entire cure."

This is precisely the conclusion to which, from the observation of facts, our own mind has long been tending. We believe that few persons indeed are born with so strong a tendency to this disease, as to preclude all possibility of reaching a tolerably old age, and of enjoying tolerable health while life lasts. We believe, moreover, that nature, for the most part, not only in consumption but in most other diseases, works the entire cure. The more medicine, in general, the worse the practice; and the less medicine the better, and more likely to be successful—provided always there is something tangible for the patient to fix his eye and faith upon. Hence, no doubt, at least in part, the success of homœopathy.

Removing Cancers.—The researches of some of the most wise and careful men in France, have led to the conclusion that the ablation, or removal of cancer (leaving out of the account the risks attending the operation itself) "does little, even when successful, to prolong life." This, too, is a most important and remarkable conclusion. The researches of the French embraced nearly three thousand operations.

Mr. Audubon.—This distinguished naturalist, now sixty years of age, has a robust constitution, though, say the papers, not a stout frame; a cheerful temper and much vivacity. He affirms that "he has not taken a particle of medicine for twenty years; yet he is capable of any fatigue—can walk 35 miles a day with ease for months—can sleep any where in the open air, and endure all climates. His principal food is soaked sea biscuit and molasses. He cannot well masticate meat on account of having lost his teeth, and when he uses any is obliged to boil it to rags. He says any man can live 100 years with temperate habits, regularity and attention to diet."

Going into Water while Hot.—Died at Lexington, Mass. on the 15th of July last, Mr. Hammond Locke, aged 53. His death was occasioned by going into the water under improper circumstances; so his physican said, and so it doubtless was. He had been mowing all day, and at night thought he would go into the water to bathe. He swam out a short distance, and on returning began to falter, and dropped his head partly under water, but not sinking, a person standing by reached his hand and pulled him out, but the vital spark had fled. Let his death be a caution to those who go into the water at night, after a long day of heat and fatigue. Thousands are injured in this way, more or less, who never know or think of the cause of their suffering. They do not suffer materially, at the time; they are only a little languid or pale; but the seeds of disease are sown, and some of the threads of life severed.

Small Quantities of Alcohol Injurious.—The writer of a series of very able essays in the Boston Medical and Surgical Journal, comes, at last, to the conclusion that "temperate drinking" of alcoholic liquors, does always produce disease of the stomach, and that the extent of the disease is proportioned to the quantity of alcohol drank.

Hereditary Descent.—We have just seen notice of the death of a brother and sister from a New Hampshire family—one 20, the other 22 years of age—from consumption. All the family which survive are more or less inclined to consumption, scrofula, or mania—subjects of great nervousness, and victims of ten thousand little ills—and one or two of them bid fair, ere long, to follow the departed. Now these children had, for their father, a half insane, and very eccentric individual, and for their mother, an invalid; but whether a maniac or a consumptive, we have not been able to learn. Is all this mere accident? Is all hap-hâzard?

There is a reverse of the picture. We know a large family of Massachusetts, where all the children incline to "nervousness," or "dyspepsia." Here the parents, instead of being maniacal or consumptive have been remarkably healthy—so much so, that they have ever lived at the expense of life, and at the expense of the lives and health of their posterity.

Caution to Printers,—Dr. Joslin, of New York, reports a case in which a compositor was attacked with paralysis of the face, in consequence of holding type in his mouth while correcting " proof." It required three or four months to effect a cure.

Dog Killing.—We are for living "peaceably" with all men, if possible, as is enjoined by high authority—aye, and with all other animals, dogs not excepted. Yet if we cannot rejoice at dog killing, we cannot help noticing facts of this sort—for they have a very important bearing on health and economy. According to the Journal of Commerce, 1161 dogs were slain in New York in the months of June, July, and August. The same Journal, however, complains of the troublesome character of the hundreds and thousands that remain.

Animal Poison.—A young man in Baltimore came to his death, not long since, by skinning a diseased cow, with a sore hand. These cases are very common among us, and seem to be more frequent than formerly.

Mr. Gourlay —This gentleman, after much fatigue, one day, about the middle of June last, slept about two hours; but he has been wide awake ever since. [See the Boston Medical and Surgical Journal, and one of our recent numbers.]

Corpulent Men —Daniel Lambert weighed 739 lbs.; Roger Byrne, 578; Benjamin Pritchard of Kentucky, 530; Caleb Towle of New Hampshire, 515; and the noted Bright, of England, 460. Their average weight was 564 lbs.

TEACHER OF HEALTH.

DECEMBER, 1843.

THE STOMACH VERY "ACCOMMODATING."

"The stomach, after all, is a very accommodating thing," say some of those who wish most earnestly to have it so. "Man can derive nourishment," they add, "from almost every thing in the animal and vegetable kingdom, and perhaps sometimes from the very mineral world itself. Nay, there is evidence, in his very structure, that it was the Creator's intention it should be so. Why, then, is so much said, at the present day, about "what we shall eat, and what we shall drink.'"

These sentiments, found in the mouths of almost all, especially of many who ought to know better than to make the inferences from them which they do, are certainly not wholly destitute of truth. Man certainly is so constituted that he can eat almost any thing, and yet derive nourishment from it. And it is a wise constitution of things; and one for which we ought ever to be thankful to the great Creator.

But it does not follow that because we can derive nourishment from almost every thing, we are therefore in duty bound, in all circumstances, to *eat every thing*. It does not follow that because the digestive powers can form a sort of imperfect chyle from bark and moss, as in Norway, and Lapland, and Labrador, that therefore we ought in all circumstances to eat bark and moss. Nor does it follow that because some of the northern nations, chilled with almost perpetual frost, can spin out to fifty or sixty years a miserable existence, on almost nothing but fish and oil, we ought therefore to eat nothing but fish and oil. No one will pretend it.

Every one knows that the same Creator who has given us a wonderful apparatus for digestion, has given us also the right of choice;—that is, has made us free agents. But to say that because we *can* eat and drink almost every thing, therefore we *ought* to do it, what is it but to deny us—so far as this matter is concerned—the right of choice?

And yet if the popular argument with which we have introduced these remarks proves any thing, it proves that because God has given us an almost endless variety of nutritious substances, animal and vegetable—to say nothing of mineral—therefore it is his will that we should eat them indiscriminately.

We reject, therefore, the argument, *in toto;* though we admit the fact from which it is unwarrantably deduced. We believe that while man can subsist, and even sometimes spin out his existence to sixty or seventy years, on almost every species of animal and vegetable food, yet it is not only the privilege, but the duty of every one who enjoys the blessings of civilization, to use his senses and his reasoning powers, and the testimony of others, in making a selection. Though we *could* eat all things, were we able to be in all parts of the world at the same instant, and had we stomachs of sufficient capacity to hold a little of each, yet we believe it to be the part of wisdom to ascertain, by observation, experience and human testimony, which are best, and make our selection accordingly.

We have said that we believe it to be the part of wisdom to make the best selection we can;—we may go farther, and say that we deem it downright folly to do otherwise.

There are two objects in eating—pleasure and utility; and whatever best secures both these objects, is the best selection. Not what best secures them for an hour, or a day, or a week, or a *year* alone, but what will best secure them through every possible period of our existence.

Here the question recurs, " What *will* secure, in the best manner, these two objects?" And the same answer too recurs; whatever our experience, corrected by the experience of others, has found to be best. God has given no positive law on the subject, which descends to particulars. He has, indeed, by the laws given to the ancient Israelites, through Moses, afforded us many valuable hints; but is it not obvious such a code cannot be exactly applicable to our times and circumstances? He has also given one general law; the same in substance with the great principle with which we have just started; " Whether, therefore, ye eat, or drink, or whatsoever ye do, do all to the glory of God." But this does not determine whether bread or meat is best for us; or if both are useful, what particular kinds of either. All this is left to be deduced from experience—individual and collective.

Before we enter farther upon this subject, it is necessary to say more distinctly than we have yet done, that our own experience is not an infallible test. If a few half-starved and famished Robinson Crusoes were cast upon a desert island, inhabited only by wild beasts, their stomachs would find but little difficulty in becoming accommodated to their condition, so as to relish the flesh of deer and goats and other animals. And not only so, it is probable that if the climate were not too hot, nine persons out of ten, under these circumstances, would become so much attached to flesh eating as to prefer it for life, even after they had it in their power to obtain vegetables. So in a very different case; if the same persons were to be cast on an island where no flesh could be had, but which abounded throughout the year with fruits and grain, there is no doubt that they would become equally attached to this sort of food exclusively. Such is the power of habit, in attaching us to things to which we have been accustomed. But who will undertake to settle the question—from an experience so narrow and insulated—what is best for human sustenance, on the whole? We might as well in this way, prove one thing best, which is not positively bad, as another. For custom, especially if established in early infancy, will render one thing agreeable in one case, and another in another.

"But would you have us turn our own experience out of doors?" Certainly not. Only let it be corrected by science, or what means the same thing, the knowledge acquired to the world by the experience of others. What we find to be productive of serious mischief to us, we ought to reject, science or no science in its favor. We cannot force the palate to *rectitude* at once. But even in the wide range of things not positively disagreeable, we may find many which the accumulating testimony of physicians and others, has determined to be more salutary than certain other things of which we may be excessively fond. These we should decide to use, in preference; and what principle has decided upon, in this way, habit will soon render not only agreeable, but preferable.

And it is worthy of remark, in this place, that what we are forced to reject at one period of our lives, from positive dislike, may, after further changes in the manner just mentioned, and especially after the appetite has become less perverted, be not only tolerable, but agreeable. Just as the society of a companion which was once disagreeable, may, after the gradual change of our own character for the better, and the adoption of better society generally, become most agreeable and acceptable.

We see, then, that a taste or relish for certain food is not positive proof that it is better for us. That though, like the moral conscience or judgment of the mind about the propriety of moral actions, this physical conscience or judgment of the sense of taste about things is very much the effect of habit, or creature of education, it must not be despised; but must, in some measure at least, be obeyed. What is the rule in moral matters? Are we required to go counter to the dictates of conscience? Are we not always to hear this inward monitor? If her dictates are not according to truth, she must be informed and enlightened. She may never, in any case, be wholly turned out of doors; neither may the judgment of the sense of taste, or the physical conscience. Either may be wrong, and often is so; but if so, it must be corrected; and after it is corrected, and a new and somewhat different standard of right and wrong erected, our own conduct, if we are honest, will change accordingly.

Neither moral nor physical sincerity proves any thing in regard to the general fitness and propriety of human conduct. Men may eat and drink things which are decidedly bad for them, and yet the physical conscience may cry, all's well. So with the moral conscience. Who was ever more sincere than St. Paul, even while doing *many things* (I do not say being exceedingly *mad*, for his conscience did not probably approve of that) contrary to the name of Jesus of Nazareth? Yet was he therefore innocent? Does he ever pretend so? Certainly not. His guilt was great, not for acting in obedience to the dictates of his conscience, bad as it was, so much as for *forming* such a conscience, and for not having corrected it according to the best means and light which had been afforded him. No man can say, with truth, that his conscience is formed as nearly on the basis of the will of God as it might have been. And herein consists a large measure of our guilt, and of human guilt generally. It is not so much that we violate our conscience, (though we doubtless often do even that,) as it is that conscience is itself wrong; and that it was made wrong by us, and still remains wrong through our own negligence.

Just so in regard to physical or dietetic transgression. The instinctive (if we may so say) judgment of the taste in regard to the fitness of an article of food, is perverted; and *we* have either perverted it or suffered it to remain perverted, or both. And our first duty is to correct it, and bring it to a right standard. Not, as we have already said, to any standard specified in the written law of God, for none such exists which completely meets the exigencies of our case; but a standard instituted by human, and to a great extent, universal experience.

"Aye, but this same human experience, of which you speak, has established long ago another doctrine, that 'what is meat for one is poison for another;'" you will perhaps tell us.

This doctrine, in one point of view, is partly true. Perverted as our physical natures now are, an article of food which is *agreeable* to one, is sometimes obviously disagreeable to another;—and the dislike of the latter occasionally grows into confirmed disgust. There may also be a few cases of what physiologists call idiosyncrasy—cases where we are constitutionally at variance with certain substances.

But it is *not* true *generally*, that "one man's meat is another man's poison," till our natures are distorted by education. How small the number of children who do not for the first months of their lives, use the same food, and to whom it is not only wholesome, but agreeable. What child can be found who does not originally relish milk and bread. In short, there will be found as little difference in these respects, in early life, as there is in regard to the quantity of food, or the amount of sleep, exercise, &c. demanded. We do not deny that we bring into the world constitutions so much diversified as to require a slight difference in all these respects; but not much. Instead, therefore, of the foregoing rule, the following is far *more* true; that until our education has formed artificial wants, habits and preferences, the quality as well as quantity of food, drink, sleep, exercise, required by all is nearly the same; that what is meat for one, in short, is meat for another; and what is poison for one, is poison for another. And this conclusion, instead of the former, would be generally adopted, were there not such a universal propensity in mankind to adopt wild theories.

Here the old objection will be repeated; that "the stomach, after all, is very accommodating; and that God himself has made it susceptible of this condition, even though induced by an artificial state of society."

But suppose this objection were valid; what then? We are so constituted that the mind is very accommodating too. We can take, for a time at least, all sorts of *mental* food, and if our faculties are well disciplined, we may not be able to perceive that we sustain any injury. But does it therefore follow that no injury is produced? Was the mental stomach of Madame de Stael, who, according to a writer in the "Annals of Education," devoured 600 novels in three months, or that of Louis XVI. who despatched 157 vols. in five months and seven days, wholly uninjured? Those whose moral habits are well established, may live in the midst of profanity, cruelty, gluttony, intemperance and licentiousness, and yet may boast that their character is uninjured. But is it therefore so? Is the moral sensibility wholly unimpaired?

We maintain that the parallel here drawn between what we have called the physical, mental and moral stomachs, is a just one. We also insist that though God has so constituted us that it is possible for us to exist, and not degenerate very rapidly, while exposed to evil impressions at either of these three points, that ultimate injury must inevitably be produced unless we resist them. If we swallow them down with impunity, and say, Peace, Peace; it will not prevent sudden destruction; and though the man who bridles not his tongue may not become a swearer, or the pure man actually licentious, yet the very touch, as it were, of the soul with the swearer or the sensualist, will and must contaminate it. The keen edge of the moral sensibility will be blunted. And what adds weight to this tremendous consideration is, that this blunted sensibility to guilt and shame is transmitted—or may be—to others, both by example and the laws of hereditary descent. The devourer of novels, and all sorts of books, may not seem directly injured, but the sensibility—the tone—of his intellectual stomach is certainly blunted; and he and those that are around him, or that may come after him, inevitably injured. In like manner though the robust and the healthy—those to whom the Author of nature has given "*iron* constitutions," may eat "all things" indiscriminately, and seem to go on in security; yet let them know that they are all the while diminishing the sensibility or tone of their stomachs, and must sooner or later pay the dreadful penalty; and happy for them if others, to the third and fourth generation, are not innocent sufferers with them.

We have seen already that the physical no less than the mental and moral conscience, may be wrong, and the individual may be "guilty," present sincerity to the contrary notwithstanding. We may now add that the physical no less than the moral *susceptibility* often becomes deadened, and with the same awful consequences; excep that the death of the soul is in the one case direct, and in the other indirect, i. e. through the medium of the body.

Those that say so much about the stomach's being a very accommodating thing, may be divided into two classes. The first, but by far the least numerous class, taking this important principle for granted, are careful to learn from human testimony on the subject what is best for them, and by its judicious use, render themselves strongly attached to it. They are, moreover, careful to bring up their children in the way they should go, that when they are old, they will not desire to depart from it.

The second class—constituting a large proportion of mankind, taking for granted the same principle, eat "whatsoever they list." Perhaps the physical conscience remonstrates occasionally, for a time, but at length becomes adapted to her condition, and though equally *sincere* in her remonstrances, does not point out the true way of life. "There is a way that *seemeth* right unto a man, but the end thereof is death."

No persons are more sure that they are right in any matter, than the class just described. They are *sure* they are right *Why* are they sure? *Because* they are sure. They feel no immediate inconvenience. They are *sincere.* How then can they be wrong? "Has not that God," they ask, "who made the sense of taste and organs of digestion, and made such and such things to relish well and digest well, in this way given his sanction to their use?"

The truth is, God did not make their present perverted taste, and imperfect organs of digestion. He made man comparatively upright; but he has sought out inventions. He no more made the artificial tastes and powers of digestion in men, than he made the artificial thirst of the drunkard for spirituous liquors. And he who charges the one on the Creator, may and should, by parity of reasoning, charge on him the other.

"But do our present preferences indicate, in no degree, what is right? And if not, would not this be to turn our own experience wholly out of doors?"

Present preferences may or may not indicate what is best, according to the manner of our education. In general, however, such has been the force and extent of error that they do not indicate what is *best;* though they may often point out what is *worst.* In this respect, if in no other, the experience of every individual is valuable. If an article of food is so positively disgusting as to produce immediate and great disturbance, it cannot at once be made a regular article of diet, however excellent in its nature, abstractly considered. Or if owing to early associations or idiosyncrasies, it is indigestible or produces pain, it must be avoided.

The class of those who endeavor to habituate themselves and their families to what is best, is at present very small; but is evidently increasing. The far greater number never ask what is best, but only what is worst. Now this is to adopt as low a standard, practically, as it is in morals to make it our great point to ascertain which moral actions are decidedly bad, (or rather which are the worst,) and merely avoid *them.* The truly enlightened and thorough going disciple of Christ, does not, in morals, ask what bad things he must avoid. He does not willingly even tread on doubtful ground. He asks what actions are *best;* and studies to take a course, which will produce to him and to others *the most good.* Exactly so with dietetics, as the Christian should regard them. He should not tread on doubtful ground; remembering that "he that doubteth is condemned if he eat," literally.

Do you still ask what particular articles of food *are* best? If you have come, in sincerity, to this point, you are on Christian ground. But these remarks have been extended to such a length that you must look for a reply in past numbers, and other volumes.

IS MAN OMNIVOROUS?

The following common sense article is from the Philadelphia "Public Ledger," of Aug. 24. In relating facts from our own history, the writer, whoever he may be, could have said *thirteen* years instead of *twelve*. The anecdote of John Sinclair, moreover, is a little misstated. The case was that of a British surgeon a friend to Sinclair. Otherwise the writer is in all respects correct.

The animal kingdom is divided into three kinds of eaters—the carnivorous, the omnivorous, and the frugivorous. One of the arguments in favor of the affirmative of the question placed at the head of this article is

Man's Capability.—He is so formed that he can and does adapt himself to his diet, whether it be human flesh, as eaten by cannibals, train oil by the Esquimaux, roast beef by the English, or simple rice by the Brahmin. Hence, it is urged, man's omnivorousness is evident from his known capability to live on animal, vegetable, or mixed food. But some fifty years ago, man was classed among the carnivorous eaters, and if such an argument as the above had been advanced, its advocates would probably have replied that

Carnivorous Animals have the same Capability.—All flesh-eating animals eat, also, more or less vegetables and fruit; and even vegetable-eating animals have been made to live on flesh. Baron Cuvier says—"A lamb which was fed for some time on flesh, by a ship's crew, refused its natural diet at the end of the voyage. There are numerous instances of horses, sheep, oxen, and even wood-pigeons having been taught to live upon flesh until they have loathed their natural aliment." The *capability* of living, therefore, upon any peculiar diet, is no proof at all of natural adaptability; that can be more correctly discovered by a comparative examination of the structure, physiology and instinct of animals. Again, the hog and rat are the only undisputed omnivorous animals—and must it be granted that man is naturally so great a slave to sensualism, that he is to be classed with these gross animals as omnivorous? Rather by far let us be named with the lion, the tiger, or the dog, than degrade human nature by coupling MAN with HOG!

Let us, however, candidly investigate the matter, without prejudice, and with a sincere desire to arrive at the truth. Let us see whether there is any thing in the anatomy or physiology of man, that, by careful comparison, classes him with those animals instinctively subsisting on carnivorous food, or that assimilates him to the omnivorous animals.

It is not necessary to prove that throughout all nature there are evidences of design. Means are adapted to ends. There is no superfluity. The purposes and plans of the Creator are consistent, uniform and unchanging. Unvitiated instinct is even more to be relied on, than human reason. *The accompaniment of a uniform digestive structure in a diversity of animals, with a uniform instinctive sustenance, clearly demonstrates a law of nature with regard to the diet of such digestive structure in whatever animals found.* If from an examination of the structure and operations of the digestive apparatus of man, it should appear to correspond with that of carnivorous or flesh-eating animals, it would be evidence of purpose or design of a similarity of subsistence—it would prove that he is carnivorous. If the formation corresponds to the omnivorous, then man must be classed as an omnivorous animal. If, however, it corresponds with the frugivorous, it must be admitted as an evidence of design on the part of the Creator, of man's subsisting wholly on fruits and vegetables, as is done by frugivorous animals.

The digestive apparatus consists briefly, of teeth, jaws, salivary glands, the gullet or œsophagus, being the pipe leading from the mouth to the stomach, and the stomach.

The teeth of carnivorous animals are adapted wholly for cutting and tearing their food. The front teeth are small and sharp—the teeth commonly called canine, in them, are longer than the other teeth, and taper off round to a point. The back teeth are like the teeth of a saw—so that when the jaws are closed, they fit into one another, and are hence called "incisors." The jaws are fixed and incapable of any other motion than that of opening and shutting; they have no side motion. In comparison with vegetable-eating animals, their salivary glands are very small, and their stomachs are large and powerful.

There is no difference between the omnivorous and carnivorous animals, as above described, excepting the back teeth; the three first of which are like those of carnivorous, the three further back are like horses.

The teeth of frugivorous animals are evidently designed for cutting and *grinding* the food. Many of the frugivorous have also the four canine teeth, so that though thus named, they are as much belonging to the frugivorous as to dogs themselves. They do not project so much, however, beyond the other teeth in the frugivorous, as is the case in the dog and other carnivorous animals; but they are of the same form, and from that similarity alone, it is presumed they have been called "canine." The back teeth are molars or grinders only. The lower jaw has a lateral or sidewise motion; and the salivary glands are large, for the purpose of moistening the food, and in part masticating it for the stomach.

Thus far, then, I have stated the distinguishing parts in the structure of the digestive functions of the three clases of eaters. All that is here said may be observed at any time, by such persons as are disposed to make the observation. Take a dog or a cat; the hog or rat;

the cow, sheep or horse, and you have the three classes. Examine for yourself, and see if the above descriptions are not correct. Then examine yourself, and say in what particular any of your masticating or digestive apparatus corresponds with those of the carnivorous or omnivorous animals. *You can find none whatever.* But there is a striking similarity between the digestive functions of frugivorous animals and those of man.

The teeth of man bear no resemblance to the teeth of omnivorous or carnivorous animals, but they are precisely similar to those of the orang outang and other frugivorous species.

The lower jaw of man is not so strong as that of the omnivorous and carnivorous animals; but it has a lateral or sidewise motion, similar to that of the other frugivorous, but of which no naturally formed flesh eater is possessed.

The salivary glands are large in man, as they are in all frugivorous animals; while the omnivorous and carnivorous are endowed with very small glands.

It might also be added, that the stomach of man is not proportionably large or powerful with that of carnivorous or omnivorous animals; which it is invariably found to be in comparison with the fruit-eaters.

What, then, is the deduction from these facts?

That man is neither omnivorous nor carnivorous, but unequivocally and entirely frugivorous. Or, in other words, the law of nature emphatically prescribes vegetable food as the sole diet of man; and declares that the eating of flesh by him is a *violation of the purpose of his Creator*, as clearly manifested by the plan of his structure.

But it may be said, "If these things are so, why have not physicians told us; they must be aware of the facts enumerated—why have they kept us in the dark?" Simply because it is not their business to give advice without a fee. They adhere, too, to the practice of flesh eating from habit; not because they do not know better, but because it would involve an effort; it would require a sacrifice individually to do without it; and it would be *destructive*, in a great measure, *of their business.* True, all medical men are not thus selfish and slavish. Many have not only spoken out, but have subsequently lived on the productions of the vegetable kingdom alone. Dr. Lamb, of London, has written considerably upon this subject, and has been an abstainer upwards of *fifty* years. Sir John Sinclair, an eminent British surgeon, said "he had worn out two armies in two wars, and had his health tried in all ways, but by abstinence from animal food, wine and spirits of all kinds, he had preserved it unimpaired." Dr. Wm. A. Alcott, of Boston, author of the "House I live in," "Teacher of Health," &c., &c., has also published a work on "Vegetable Diet," and has been an abstainer from animal food upwards of twelve years.

A word in conclusion. The temperance cause has diffused itself like the rays of the meridian sun, over the length and breadth of the land. It has produced a moral renovation in the whole state of society. *It must be followed by the Abstinence from Flesh, or Vegetable Diet Cause*—which shall teach man the most useful of all knowledge, the knowledge of himself, his physical and mental wants, capabilities and powers. It is now mustering its forces, and preparing to beat the alarm. The flag is thrown to the breeze and already *thousands* in this country alone rally around its staff.

Much more might be said in support of this law of nature, that man is frugivorous, and that it is sinful to eat the flesh of animals. Inquire, examine, investigate, and the light of truth shall illuminate you in your researches, and lead you on to brighter and purer gems as you advance.

"THOU SHALT NOT KILL."

A LITTLE boy just four years and a half old was standing at a window, one morning, noticing a butcher as he dealtout flesh meat to a neighboring family. After standing there in silence for some time he said, "Do oxen have souls, mother?" "No my son," was the reply. "What do they do with them when they die?" said he.

Now this boy had never been told much about the soul. The remarks about the souls of the oxen were all his own. The inquiry with regard to their dying was not fully understood; but was believed to relate to their existence in another world. He had repeatedly been told that the souls of men, women and children, after death, went away to live elsewhere; but nothing, it is believed, had been said, either affirmatively or negatively, about cattle.

We have one objection to telling children, at this early age, or rather at this stage of development, that all other animals besides man have no souls. Better, as it seems to us, to tell them honestly we do not know that they have souls. Why should we affirm positively that which we do not know;—concerning which we have had as yet no revelation? Is it done with a sort of unconscious or involuntary intention to reconcile them to the common custom of shedding their blood? Is it done lest they should be over-tender in their feelings towards the brute creation generally? Or is it done because our treatment of these animals, time immemorial, having been such as to render us unwilling to meet them in another life, should such a thing happen, we are ready to admit the common belief that they will not come there?

One of the evils, as it strikes us, to which the custom of flesh eating has reduced us, is this necessity of prejudging to annihilation all animals but our own species. For it would be a terrible drawback upon our comfort—so long as we possess consciences—to have our children imbibe the idea that beasts may by possibility have souls as well as we, when we make no scruple at all to hurry them away, even the unoffending, at every hour, (provided it suits our convenience,) to the grand receptacle of souls beyond the precincts of time. Children and youth, in these circumstances, would either lose all thoughts of solemnity in connection with death and eternity, or become morbidly conscientious and tremblingly fearful. They would become, like Caligula, utterly regardless of life, as a thing of no consequence, or, like the modern Brahmin, afraid to take it away from the meanest or most troublesome insect or reptile.

We do not say that an argument may be derived from considerations like these in favor of the future existence of brutal souls, for we believe not only that nothing is known on this subject, but that nothing certain can be known. But we do say, that if the custom of flesh eating involves us in consequences so disastrous to morality as have been more than intimated by the foregoing remarks, it were worth our while to question the expediency of its continuance.* Paul has said, "It is good neither to eat flesh nor to drink wine, nor any thing whereby thy brother stumbleth." If our community stumble at all in this matter, they stumble early; so early that, in a world where all stumble from habit, it is no wonder that no one should be troubled with the irregular movements of his neighbor.

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* The willingness of people to feast upon the slain is not natural, but acquired. A little boy of our own less than 5 years old, who had never seen dead animals upon the table, went to reside with a friend in the country, where fish and fowl were quite current. At first the little fellow was astonished and even outrageous. People who killed fish and hens, he said, would never go to heaven. But in two months he became quite reconciled to the daily presence of dead animals, and made no sort of complaint. It is thus that we all get reconciled to the bloodshed of the unoffending animals.

We must say—we dare not suppress the inclination—that we have long believed the popular notion concerning animals to be fraught with much practical evil. The animals were delivered into the hand of man, no doubt, that he might take care of them—not that he might destroy them, except for good and sufficient reasons. They were not gravely delivered to him by Almighty power that he might maltreat them as much as he pleases, and then to prevent any possible qualm of conscience, say and teach his children that when beasts die there is an end of them. What we say about them may be true, but it is no truth in the mouth of those who only believe it because it is *convenient* to believe it. *We* believe, however, that God does not intend to make the truth known. His revelations concern men, and not beings above or below us—angels, brutes or demons. We may as well infer that angelic beings never had any other existence than angelic, as that brutes never will have any other than brutal.

However, it is no part of our purpose to go deeply into this subject, at this time. Let it suffice to say that if it is a guard to virtue to believe a future state necessary to make up, as it were, for the inequalities of the present life in respect to man—if the apparent allotment of good things in some instances to bad men, and of trials and martyrdom to the good, involves the necessity of a future state of more equal reward and punishment, then we see not why, by the same reasoning, the brute ought not to live again. So far as he is domesticated, his allotments are far worse than those of man. The latter has reason given him to get over his difficulties; or if it should be said that beasts reason too, then we can say that man reasons much better. But when the beast falls into difficulty—we mean suffers unjustly—he must bear it; for there is no appeal to a future tribunal. Such, we still say, is the decision of those whose interest it is to decide thus, but who certainly have no facts to guide to such a decision. So we decide, *always*, because others have always decided so.

Is it said that the Bible has decided this great question in the negative. We respectfully ask where? Not in saying that beasts perish; for if the word perish means annihilation, then the greater part of *men* are annihilated, for we are assured on all hands that except we repent we shall perish. Not in saying that the spirit of the beast goeth downward to the earth; for why should going downward *annihilate* any more than going upward? Is man annihilated because he goes downward to the grave? Is the wicked man annihilated in going downward after the resurrection?

Let us at least be consistent in this matter. The horse, it is said, in painting the gods, would be likely to make them represent their own species. And if they were to go a step farther, and take for granted the annihilation at death, of all bipeds, ought we to be at all surprised? Farther still; should they, as a natural consequent, subject to their own convenience all the rest of the animals—whether biped or quadruped—would it be strange that each rising generation of horses should be full of cruelty and blood? Would it be strange that they should feast upon their slain, and plead a divine warrant therefor? Would it be strange, if in an emergency they should feast upon their fellows? We wonder not that there are cannibals on the earth; we wonder rather, that all men are not cannibals. They would be so, were they consistent. They would be so, did they follow out their work of destruction to the end.

CLAIMS OF HOMŒOPATHY.

Dr. Coggswell, a homœopathist, of Boston, in sitting forth his claims for public patronage, has the following remarks:

"It is the ill or good fortune of the undersigned to have the most obstinate 'given over' cases *handed over* to him by his allopathic brethren, though probably with none of the best motives, but in the full belief (if not hope) that they would die under his care. In acute or recent cases, if he does not effect a cure in forty-eight hours, the fault is his, and belongs not to homœopathy, which is able to subdue any malady but sin."

The same physician also speaks of his "*improved Stethoscope*, which he has used twenty years," by means of which "he is enabled to determine the nature and seat of all *internal diseases*, both acute and chronic, the danger attending them, and the treatment specifically or homœopathically adapted to them;" and concludes by saying, "All letters for advice, and the necessary medicine for *chronic complaints*, must contain $20; for recent cases, $10, post paid, otherwise they will not be answered."

Now we are willing to admit and to encourage every modest and reasonable and decent claim of homœopathy; especially as its tendency seems to us, on the whole, to be against the popular custom of dosing and drugging ourselves *to death.* Here, however, is a little too much for us to put up with, even though appearing in as respectable a paper as the Boston Recorder, and with as respectable references as our governors and ex-governors. The slur on physicians of the old school; the boasting about the stethoscope, and of his power to determine the nature and seat of "*all* internal diseases," and "the treatment adapted to each case,"—claims we never knew made before by any finite being—to say nothing of the charges at the close, are what we did not expect from such a quarter.

We might make our boast too. We can cure *without* medicine, at least in chronic cases—if the diseased will follow our directions in full faith—as often as the homœopathist or the allopathist can *with* it, and for half the sum demanded by Dr. Coggswell. When, however, we say *without medicine*, we mean *as the general rule.* In our practice we reverse the order of both the homœopathist and the allopathist, and instead of administering medicine generally, we only give it as the exception. Instead of dosing in nine cases in ten, we can get along without any in nine cases in ten, and with better final results to the patient's constitution, saying nothing of his purse. And this we believe to be not only the "more excellent way," but the more true.

THE TAX OF IGNORANCE.

It is sometimes said, and with the utmost truth and justice, that ignorance costs more than knowledge. The following paragraph from Mr. Mann's Report—we trust we shall be pardoned once more—will serve to give some idea of the enormous taxes we are continually paying, and of the still heavier taxes to which we doom our posterity.

"Among the most pernicious consequences resulting from a general ignorance of Physiology, is the prevalent opinion that a weakly child must be prepared for a profession, or apprenticed to some in-door occupation. The plain statement of this reasoning is, that because a child is weak and puny at the beginning, he must be subjected, by his training, to further enervating processes. Instead of selecting an employment by which the feeble would be fortified, they are subjected to new debilitations. If deficiency of constitutional vigor is a plausible argument in favor of discarding healthful occupations, in regard to one generation, it must be decisive for the next, and must continue to gather force as the family deteriorates. Hence, to a great extent, that abandonment by our young men of the invigorating employments of agriculture and the handicrafts, the consequent crowding of the professions, and the eager competition for inactive occupations—an evil self-aggravating, and reproductive of its own kind, manifold. If the weakly and ignorant father cannot work out of doors, he will be likely so to rear his children that they cannot work even in the house; and the grand-children will be able to work no where. Each generation of such lineage adds something to the stock of debility and disease which it inherits, and entails the whole upon its posterity."

EDITOR'S FAREWFLL.

With this number of the Teacher of Health, we close our editorial career—perhaps forever. We were the editor of the Juvenile Rambler two years; the People's Magazine one year; Parley's Magazine, four years; the Annals of Education, two or three years; and lastly, we have edited this journal, under the varying names of Moral Reformer, Library of Health, and Teacher of Health, nine years.

We close our labors of this sort, because we are no longer able to make the sacrifices we have hitherto been disposed to make. We are willing—and have been for years—for the love we bear to the family and the church, God's own institutions, to work for nothing, contented with that bread and water for our family which was obtained by other incidental labors. But the time has come, not when our sacrifices must cease, but when they must cease to be made in this particular form. The time has come, in a word, when we must take care of a rising family.

Most sincerely do we wish we could, in our parting words, commend to our readers, more heartily, our little volumes, both periodical and otherwise. But though we have endeavored to do our best under the circumstances, we feel deeply that they have many imperfections. Some of these we shall probably remove, however, in future editions. The nine volumes of this journal, bound up and preserved, will at least serve as a sort of remembrancer of a former friend, to those who chose to remember us. We value most, however, as a legacy, the "House I live in," for the young in families and schools; the "Young Man's Guide," and the "Young Woman's Guide," for the classes for whom they were respectively designed; the "Young Husband," and the "Young Wife;" the "Sabbath School as it should be, for Sabbath School Teachers;" "Slate and Black Board Exercises," and "Confessions of a School Master," for Teachers of Common Schools; and the "Young Mother," "Christian Mother," and the "Mother's Medical Guide," for families. Of all these works, imperfect as we deem them, we entertain hope. D. S. King, & Co., G. W. Light, and T. R. Marvin, of this city, are the present publishers of most of them.

We have other works, however, especially for those who wish to know something of our ultraisms. Among these are the "Young Housekeeper," "Tea and Coffee," "Tobacco," and "Vegetable Diet."—We say nothing, in this connection, of a long series of Sabbath School books, and other books for children and youth, or of our numerour contributions to the various periodicals of our land, or of many volumes which do not appear to the world in our own name. They are before the world; and the world has passed its verdict concerning them.

Let not the reader suppose we are about to remit our efforts; for if that Providence, which has already deferred the sentence of death in us seventeen years, should please to grant a still longer respite, the world may yet hear from us; or if not, our own family and church and neighborhood may. At present, we repeat it, we only propose to change the form and scene of our labors.

May He who has been our friend and guide forty-five years, be our Father and friend to the end of our career, and help both us and our readers to fulfil our mission and accomplish his will concerning us;—to whom be all the glory forever.

Hartford, Conn., Dec., 1843.